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ABSTRACT

This curriculum bulletin contains articles relevant to problems in bilingual education for American Indians. The first section includes articles presenting a broad view of past and present activities in bilingual education for American Indians and Eskimos. The history of language instruction in American Indian schools and of bilingual education in Bureau of Indian Affairs schools is discussed along with the Bilingual Education Act and its effect on the American Indian. Two statements on bilingualism appear, and a summary of pertinent research in bilingual education is included. Part Two deals with practical aspects and case studies. One article discusses what classroom teachers should know about bilingual education. Three others discuss programs for Navaho children. The final section is a bibliography of approximately 70 books and articles on bilingualism written between 1953 and 1971; some of the more important entries are annotated. One appendix provides a glossary of relevant terms. The second appendix presents some linguistic principles for describing language. (VM)

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BILINGUAL EDUCATION FOR AMERICAN INDIANS

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BILINGUAL EDUCATION FOR AMERICAN INDIANS

Table of Contents

Foreword	James E. Hawkins
"The Indian Youngster is an Indian. . ." An Introduction	Robert J. Rebert

Part One

A History of Language Instruction in American Indian Schools: The Imposition of English by Government Policy	Arnold H. Leibowitz
Two Statements on Bilingualism	Bruce A. Gaarder and TESOL
A Summary of Pertinent Research in Bilingual Education	L. Madison Coombs
A History of of Bilingual Education in BIA Schools	Evelyn Bauer
The Bilingual Education Act and the American Indian	Edward A. Tennant

Part Two

What Classroom Teachers Should Know About Bilingual Education	Miles V. Zintz
Literacy in the Vernacular: The Case of Navajo	Bernard Spolsky and Wayne Holm
Planning Conference for a Bilingual Kindergarten Program for Navajo Children	Sirarpi Ohannessian
Second Planning Conference for a Bilingual Kindergarten Program for Navajo Children	Sirarpi Ohannessian

Part Three

Books on Bilingualism: Abstracts and Select Bibliography	Harry B. Berendzen

Appendices

Appendix I	Glossary of Terms
Appendix II	Ways to Describe Language

FOREWORD

Lytton Stratchey in *Words and Poetry* wrote, "Perhaps of all the creations of man, language is the most astonishing." All too often we take for granted the wondrous complexity of our own mother tongue. Little did we realize as children that the language we now use so freely and with such ease was already becoming second nature to us. The warm associations and shades of living context took shape imperceptibly in our minds and hearts before we ever knew there was any such place as school.

By the time we entered a classroom we were already what Louisa May Alcott called *Little Men* and *Little Women.* Once in the classroom our teachers in a thousand conscious or subtle ways built on what we already were and what we already had with no barrier to block that delicate process of communication.

Unfortunately this has not always been the case for a large number of American Indian children. Very often the Indian child comes from a different type of home life with a different language nonetheless wondrous in its own complexity, delicate in its shades of meaning, and laden with its own warm overtones of love, life, and familiarity. For such a child to be thrust into a totally new and strange situation as an English-speaking classroom with a language and set of values so different from his own is to stack the odds against the sound education of that child.

Culture shock at any age can be a grueling ordeal. In a child it is heart-rending. What is encouraging about the new thrust of bilingual education for the Indian children who need it is that it will go a long way in making these children feel at home in their early classroom years. If these children are able to work in their own frame of reference, with their own familiar language and customs, there is every reason to hope that their early experience in school will be a happy and fruitful endeavor.

Bilingual education for Indian children is a great challenge for those who are committed to work for and with these children. It requires a great deal of effort and dedication from the people involved. It requires likewise an unusual amount of cooperation and coordination from every side.

Encouraging beginnings have been made. Much remains to be done. When I look, however, at both the effort that has already been made and the ground that has been gained, I feel confident that these programs will continue to develop and expand until we have reached the goal of offering every Indian child a happy, healthy, and wholesome education.

James E. Hawkins
Director
Office of Education Programs

"THE INDIAN YOUNGSTER IS AN INDIAN . . ."

AN INTRODUCTION

RoLert Rebert*

There is an unpretentious rule that works as well for education as it does for progress in general. Stated plainly the rule says: start where you are, take what you have, and make something out of it.

If the results of Indian education have been by and large disappointing, if the "something" educators have tried to make out of Indian students has been consistently less than the "something" they have helped Anglo students to achieve, it is largely due to the fact that - for any number of reasons, good, bad, or indifferent - they did not start where the Indian student was nor did they build on what the Indian student already had. They all but totally ignored the rich heritage of language, culture, and wisdom that the Indian child brought with him to school.

"You have to start with the youngster where he is," educator-psychologist John Bryde told the Senate Special Subcommittee on Indian Education in December of 1967. "The Indian youngster is an Indian. You have to start with his Indian awareness and build on it. We have been starting with the Indian youngster where the non-Indian child is. We should be starting with him as an Indian child, teaching him values, and teaching him, first of all, to be an Indian. Then to be an Indian-American within the larger culture." Since this had not been the case, Bryde concluded, ". . .We have been making a pedagogical mistake. We have been making a psychological mistake. We have been making an anthropological mistake. We have been making all kinds of mistakes, according to the behavioral sciences."

If the natural heritage of the American Indian has been overlooked by educators, so too has the original meaning of education too often been forgotten. The word *education* originally meant and still basically means the *drawing out* of a person's full human potential. Education is the nurturing of a seed, surrounding it with warmth and sunshine, tending it till it flowers and bears fruit. This is what Indian education, on the whole, has not done.

No one will deny the teacher's task of transferring information. Simple information transfer, however, is but one of the many means in providing a wholesome education and one of the less important means. Today's electronic data machines make the brightest human memory seem feeble indeed. On the other hand, it is beyond the grasp of machinery to feel the exhilaration of simple discovery or the delight of childhood wonder. Information may add rings to the tree of memory, but much more in the line of genuine education is needed to add the dimension of self-fulfillment to the human spirit.

This is why bilingualism is such a promising development in Indian education. Educators are finally being encouraged to develop bilingual programs that start where the Indian pupil is, take what he already has, and offer him the choice to make out of it what he wants.

Choice, then, is one of the key words in bilingual education. Not only is a child of a minority mother tongue offered a more sound education based on what he already is and has when he comes to school - and many early childhood psychologists today maintain that a child's IQ *potential* is largely determined before he ever goes to school - but he is given the genuine freedom to choose to what degree he wants to function in the mainstream of American society or remain in his own culture. Official government policy is finally encouraging serious, long-term bilingual programs that will offer Indians the choice of success in the "American" way of life, the "Indian" way of life, or any combination of the two. Bicultural mobility through bilingual education has become a hopeful new policy in Indian education.

If Indian bilingual education, however, is to become more than a fad, experiment, or mere palliative, if it is to become a genuine and lasting success, it needs more than initial enthusiasm. There are many obstacles to be hurdled. A policy is not a program. A slogan is not success. The problems must be foreseen and forestalled so that the education of Indian children need not rise and fall with the whims of history.

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The first condition for a successful or even a useful bilingual program is the local community. Does the situation warrant a truly bilingual program and to what extent? Are there a sufficient number of children who speak only or mainly their vernacular when they come to school? Do the parents of the children want such a program? Will it be backed by the local community? Just as there is no such thing as "good English," but only good English in a particular situation, so too, there is no such thing as "preferred bilingualism," only bilingualism preferred in a particular situation.

If a child from a non-English speaking home will profit more by receiving his basic school education in his own vernacular and provided there are enough such children to justify a bilingual school program in a given area, then any number of other factors must also be considered before a successful program can be set up. These include linguistic, political, educational, socio-cultural, economic, financial, and practical considerations. All of these must be carefully considered in developing any bilingual program.

It is hoped that this monograph will be of use not only to those who are interested in the past or present state of Indian bilingual education, but also to those who will be directly and practically involved in the development of new programs.

The first section of this bulletin is both general and historical. It is intended to give a broad view of past and present activities in bilingual education for American Indians and Eskimos.

The second section contains articles much more particular and practical in nature. Professor Miles Zintz' article will be of special interest to teachers involved in bilingual classroom situations. The other three articles in Part Two of the bulletin are case studies of bilingual programs for Navajo. Since they are developmental studies, the methods and results of research will be of great value to those considering bilingual programs for other languages.

The third section of the bulletin contains a select list of key books on bilingualism with special reference to Indian education. Brief abstracts of the more important books and articles are included. This section on books together with the references and bibliographies found with other articles should provide a choice selection of background reading for anyone interested in the field.

It may be that this bulletin will do little towards resolving the many academic controversies and tentative hypotheses within bilingual education in general. It is not intended to do so. "Much of the argument over the effects of bilingualism is due to the multi-dimensional character of the phenomenon and the great degree of variability of each dimension," remarks William F. Mackey, director of the International Center for Research on Bilingualism in Quebec. Bilingualism is based on far too many individual, complex, and unstable factors to even attempt such an analysis in a curriculum bulletin.

Rather than get mired in the "multi-dimensional character" of bilingualism, we have chosen instead to start with the most important datum: the Indian child who leaves his home and family to enter a school that has too often been a strange and forbidding world to him. We have chosen to base our rationale for bilingual Indian education on the indisputable fact that any education ought to begin where the child is, take what he has, and make the most of it. We are enthusiastic about encouraging bilingual education for American Indians because it shows great promise of doing just that.

A HISTORY OF LANGUAGE POLICY IN AMERICAN INDIAN SCHOOLS

Arnold H. Leibowitz*

From 1778, when the first treaty between the United States and an Indian nation was signed, until 1871, treaties, together with the appropriate Constitutional provisions,[1] were the main legal basis for Federal policies concerning Indians. On December 2, 1794, the first treaty agreement that included educational provisions was negotiated with the Oneida, Tuscarora, and Stockbridge Indians. This treaty provided for instruction in the arts of the miller and sawyer. This was soon followed by a treaty with the Qaskaskia Indians which provided an annual contribution for seven years to support a Catholic priest who was to instruct in literature.[2]

In 1802. Congress made provisions for the expenditure of funds not to exceed $15,000 per year to promote "civilization among the aborigines." For another decade, this action stood as the sole indication that Congress had recognized responsibility for Indian education. Then, in 1819, Congress enacted a provision which "still stands as the organic legal basis for most of the education work of the Indian Service:"[3]

> The president may. . .employ capable persons. . .for teaching (Indian) children in reading, writing, arithmetic. . .for the purpose of. . .introducing among them the habits and art of civilization.[4]

The 1819 statute included a permanent annual appropriation of $10,000 which the President apportioned among the missionary organizations that had carried out educational activities for the Indians for the preceding three hundred years. During the next fifty years, the schools continued to be maintained either wholly by missionaries or with the joint support of missionary groups and of the Government. The annual appropriation, known as the "civilization fund," continued until the end of the treaty period in 1871.

No specific mention is made regarding the use of the English language in either the 1802 or 1819 provisions. Both attempt to promote "civilization." That the English language is the "civilized" tongue and the Indian language "barbaric" is implied in these provisions, but not stated.[5]

As America expanded, the desire for the land owned and occupied by the Indians became very great. Initially the hope was that the problem would solve itself: that as they became civilized their need for land would naturally decrease.[6] Educational policy was seen as a means to civilize the Indian

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1. The Commerce Clause, "to regulate commerce. . .with the Indian tribes" (U.S. Const., Art. I, Sec. 8, Cl. 3) gives Congress plenary power over Indian affairs. The Property Clause (U.S. Const., Art. IV, Sec. 3, Cl. 2) gives Congress power to dispose of and regulate all "property belonging to the United States." This has been held to extend to Indian property held in trust. The Supremacy Clause (U.S. Const., Art. VI, Cl. 2) makes Indian treaties and federal laws on Indian affairs the supreme law of the land, thus effectively eliminating state regulation over federally recognized Indan tribes, except as specifically allowed by Congress.

2. F. Cohen, **Handbook of Federal Indian Law** 234 (1942).

3. **Ibid.**

4. **Id.** at 240.

5. One treaty did, however, include a reference to the language to be employed. This notable exception appears in the Treaty of May 6, 1828, with the Cherokee Nation. Article 5 reads in part: "It is further agreed by the U.S. to pay $1,000. . .towards the purchase of a Printing Press and Types to aid towards the Cherokees in the progress of education, and to benefit and enlighten them as people, **in their own language.**" (emphasis supplied)

6. "The Indians being the prior occupants, possess the right of the soil. It cannot be taken from them unless by their consent, or by rights of conquest in case of a just war. To dispossess them on any other principle would be a great violation of the fundamental laws of nature." Statement of Henry Knox quoted in D. McNickle, **The Indian Tribes of the United States; Ethnic and Cultural Survival** 32 (1962) See also Johnson v. MacIntosh 21 U.S. (8 Wheat.) 543 (1823); Cherokee Nation v. Georgia 30 U.S. (5 Pet.) 1 (1831) and Worcester v. Georgia 31 U.S. (6 Pet.) 515 (1832).

and, thus, permit the taking of his land. President Monroe, writing in 1817, stated: "The hunter or savage state requires a greater extent of territory to sustain it than is compatible with the progress and just claim of civilized life. . .and must yield to it."[7]

But the pressures were too great for any policy envisioning a slow, gradual weaning of the Indian from the land to run its course. At the initiative of President Andrew Jackson Congress adopted the Indian Removal Act of May 30, 1830, by which the Atlantic Gulf States and Great Lakes tribes were forcibly removed west of the Mississippi River. This provided a temporary respite, but by mid-century the expansion westward once again conflicted with Indian occupation of land.

In response to the demand for more land, the Homestead Act was passed in 1862, which opened up the Plains to the white settlers. To facilitate the process, "encouragement was given to the slaughter of big buffalo herds, the Indians' principal source of food. With their meat gone, it was believed the tribes would be forced onto the reservations by the promise of rations."[8]

English language in the Indian schools was first mentioned in the report of the Indian Peace Commission, a body appointed under an act of Congress in 1867 to make recommendations for the permanent removal of the causes of Indian hostility. Its report of 1868, motivated by a combination of humanitarianism, militarism and expansionism, states:

> . . .in the difference of language today lies two-thirds of our trouble. Schools should be established which children should be required to attend; their barbarous dialects would be blotted out and the English language substituted.[9]

The Commission report sparked a heated controversy on the use of English in the schools. Most of the religious organizations supported the bilingual policy in opposition to the government, which as a result of the report required all school instruction to be in English. President Grant in 1870 harshly criticized the practices of the missionaries, denouncing their insistence on using native dialects in their schools.[10] In 1879, two missionary societies were threatened with the withdrawal of Federal aid unless they complied with government regulations. The missionaries won a minor victory when, in 1888, the use of the Bible in the Indian tongue was approved for those schools in which religious organizations assisted.[11]

The Appropriation Act for 1871 contained a rider, declaring: "Hereafter, no Indian nation or tribe within the territory of the United States shall be acknowledged or recognized as an independent tribe or power with whom the United States may contract by treaty."[12] After the treaty period came to an end in 1871, government schools conducted exclusively in English began to be established, gradually displacing the mission schools and their bilingual approach.

Significantly, these government schools also resulted in the elimination of many of the Indian schools which the tribes had begun to establish and run themselves. Some of these Indian-initiated programs were quite significant. Thus, by 1852 the Cherokee Indian tribe had a school system of 21 schools and 2 academies—1100 pupils—run by themselves. Other tribes, the Choctaws, Creeks and Seminoles, for example, also had begun to establish and operate their own schools.[13]

Initially day schools were established. Early in their development, however, this type of schools lost favor: assimilation was more difficult while the children were still subject to the influences of their reservations. In 1873, the Board of Indian Commissioners reported:

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7. Quoted in Sen. Special Subcommittee on Indian Education of the Committee on Labor and Public Welfare, **Indian Education: A National Tragedy - A National Challenge,** 91st Cong., 1st Sess., 143 (1969) (hereinafter cited as **Indian Education).**

8. A. Josephy, Jr., **The Indian Heritage of America** 339 (1947).

9. Supt. of Indian Schools, **Sixth Ann. Rep.** 10 (1887).

10. E. Adams, **American Indian Education** 50 (1946).

11. **Ibid.**

12. McNickle, **op. cit. supra** note 166, at 43.

13. Berry, **The Education of American Indians, A Survey of the Literature,** prepared for the Sen. Special Subcommittee on Indian Education of the Committee on Labor and Public Welfare, 91st Cong., 1st Sess. 11 (1969).

> It is well-nigh impossible to teach Indian children the English language when they spend twenty hours out of the twenty-four in the wigwam, using only their native tongue. The boarding school, on the contrary, takes the youth under constant care . . .and surrounds him by an English-speaking community. . .[14]

In 1879 the first off-reservation boarding school—the institution which was to dominate Indian education for the next 50 years—was established at Carlisle, Pennsylvania.

The purpose of this school became clear in the succeeding decades: to separate the Indian child from his reservation and family, strip him of his tribal lore and mores, emphasize industrial arts, and prepare him in such a way that he would never return to his people.[15] Language became a critical element in this policy. English-language instruction and abandonment of the native language became complementary means to the end.

The language issue, which received little attention until the missionary controversy, now blossomed in almost every report concerned with Indian education. In 1881, the Board of Indian Commissioners, in their report to the President, said on this subject:

> The Policy adopted of teaching only English in the Governement schools is eminently wise. . .we have already raised two generations of Indians by unwise theories of education. . .a better system is now in use, and we trust the time is not far distant when English books and the English language will be exclusively taught in Indian schools.[16]

The coercive elements in such a policy become more apparent later in their document:

> But so long as the American people now demand that Indians shall become white men within one generation. . .(they) must be compelled to adopt the English language, must be so placed that attendance at school shall be regular, and that vacation shall not be periods of retrogression, and must breathe the atmosphere of a civilized instead of a barbarous. . .community.[17]

By 1886, there did not exist an Indian pupil whose tuition and maintenance was paid for by the U.S. government who was permitted to study in any language other than English.[18] Aside from the forced use of the English language, Indian dress and religious practices were prohibited in the schools, and all males were ordered to cut their hair short (although many Indians believed in the supernatural significance of long hair). Further Indian students were punished for speaking their own language. They remained in these schools for eight years under military discipline during which time the students were not allowed to see their parents.

The counterpart of the education policy whose objective was to dissolve the social organization of Indian life on the reservation was the Dawes Severalty Act of 1887, which was designed to dissolve the Indian land base.[19] Pressures leading to such drastic legislative measures included the discovery of gold on the Pacific Coast and the Rocky Mountains which had an explosive effect on the poulation. Too, the promoters of the transcontinental railroads sought grants of land along their routes. Thus, the Dawes Severalty Act, which ushered in the allotment period of Indian history, was passed. Its essential features were: (1) Tribal lands were to be divided and the President was authorized to assign or allot 160 acres to each Indian family head; (2) Each Indian would make his own selection, but if he failed or refused, a Government Agent would make the selection; (3) Title to the land was placed in trust for 25 years; (4) Citizenship was conferred upon all allottees and upon other Indians who abandoned their tribes and adopted "the habits of civilized life;" (5) Surplus

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14. A. Fletcher, **Indian Education and Civilization** 167 (1888).

15. **Indian Education** 148.

16. Supt. of Indian Schools, **Sixth Ann. Rep.** 10 (1887).

17. Fletcher, **op. cit. supra** note 174, at 168.

18. **Id.** at 170.

19. **Indian Education** 149.

tribal lands remaining after allotment might be sold to the U. S.[20] The allotment law and subsequent statutes set up procedures which resulted in the transfer of some 90 million acres from Indian to White owners in the next forty-five years.[21]

The philosophical relationship between educational policy and land policy of this period is clear but there was a financial tie as well. The proceeds from the destruction of the Indian land base were to be used to pay the costs of taking Indian children from their homes and placing them in Federal boarding schools.[22]

The Indians, like the Germans of the same period, resisted such attacks on their land, customs, and language. Many refused, for example, to send their children to school and students frequently burned the schools down.[23] Congress, desiring to break the resistance, passed legislation in 1893—repealed the following year—authorizing the withholding of rations and money from any Indian family for an Indian child who shall not have attended school during the preceding year.

W. N. Hailman, Superintendent of Indian Schools in 1896, questioned the educational validity of the Government policy.

> . . .the great majority of Indian teachers have labored under the delusion that they can hasten the acquisition of the English language on the part of the pupils by compulsory measures, visiting more or less severe penalties upon the unfortunate children who were caught in the use of the Indian speech. . .To throw contempt upon the child's vernacular. . .is so manifestly unreasonable and so pernicious in its perverting and destructive influence upon the child's heart-life that it is a wonder that it even should have been attempted by the philanthropic fervor of workers in Indian schools.[24]

But, except for the missionaries who continued to protest the English language emphasis in the Government-supported Indian schools, his was a solitary voice. The mission schools which remained still taught in a combination of English and native languages. As a result, at the request of various Indian tribes, contracts were made with the missions in 1905, the money being taken from treaty and trust (tribal) funds. This use of tribal funds was challenged as being contrary to the policy stated in the Appropriation Act of 1897, prohibiting an appropriation for education to be used by a sectarian school. The Supreme Court held, in 1908, that both treaty and trust funds to which the Indians could lay claim were not within the scope of the statute and could be used for the mission schools, the only bilingual schools for Indians.[25]

The techniques employed at the Indian boarding schools of the government continued until they received widespread attention with the publication of the Meriam Report, prepared by the Brookings Insitute at the request of the Secretary of Interior, in 1928. In its chapter on education, the report recommended a change in point of view. Although assimilation should continue to be the goal, the report stated that this could best be accomplished by strengthening the Indian social structure, not destroying it. The report stressed repeatedly the need for a relevant instructional curriculum based on the needs and background of the Indian students, and it deplored the failure of the schools to take into consideration or accommodate to the language of the Indian child.[26]

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20. McNickle, **op. cit. supra** note 166, at 48-49.

21. **Id.** at 49.

22. **Indian Education** 150-151; Blackfeet et. al. Nation v. U. S. 81 Ct. Cls. 101, 115, 140 (1935).

23. Forbes, "Native Americans of California and Nevada (1968)," in Sen. Hearings before the Subcommittee on Indian Education of the Committee on Labor and Public Welfare 91st Cong., 1st Sess., at 75-76 (1969).

24. Supt. of Indian Schools, **Ann. Rep.** 8 (1898).

25. Quick Bear v. Leupp 210 U.S. 50 (1908). Because of the emphasis in the text on bilingual versus exclusively English schools, the mission schools may appear to the reader to have been reasonably successful. Such was far from the case. "The net results of almost a hundred years of effort and the expenditure of hundreds of thousands of dollars for Indian education were a small number of poorly attended mission schools, a suspicious and disillusioned Indian populaton, and a few hundred products of missionary education, who, for the most part, had either returned to the blanket or were living as misfits among the Indian or white population." Quoted in Berry, **op. cit, supra** note 173, at 15. The drop-out rate in the mission schools today is far higher than that found in either the public schools or the BIA-sponsored schools.

26. R. Meriam, **The Problem of Indian Administration** (1928), **passim.**

John Collier, who became Commissioner of Indian Affairs in 1933 (and remained twelve years in that position), attempted to carry out these recommendations of the Meriam study. The Bureau of Indian Affairs sought to employ a large number of Indians. The enactment of the Indian Reorganization Act of 1934 strengthened tribal self-government and an active interest in native languages re-emerged.

In keeping with this interest, the Indian Service Summer School, organized in 1936, at its first regular session offered classes in the Sioux and Navajo languages, and there were also special demonstration classes in methods of meeting bilingual problems.[27] The Bureau of Indian Affairs also initiated efforts at adult basic education during this period and published a few bilingual curriculum materials.

The period of cultural tolerance lasted only until the early 1940s. The lack of funds and a hostile Congressional attitude put an end to Collier's programs. Some Congressmen even complained that there were dangerous communistic tendencies inherent in Indian culture which must be eliminated.[28]

In 1944, the House Indian Affairs Committee made recommendations which called for a return to the very same policies which the Meriam report of 1928 discredited. It criticized, for example, a "tendency in many reservation day schools to adapt the education to the Indian and to his reservation way of life"[29] and again called for the removal of young Indians from their homes and their placement in off-reservation boarding schools. By 1948, Congress had begun to cut funds for Indian education.[30]

Again the educational policies simply mirrored the current congressional attitudes toward the Indians: in this case the "Termination Period" of Indian history. By 1950 the goal was to get rid of Indian trust land by terminating Federal recognition and services and relocating Indians into cities. In 1953, Congress passed a law which transferred Federal jurisdiction over Indian reservations to individual states and House Concurrent Resolution 108 called for the end of Federal service to Indians—including education—in an attempt to hasten Indian assimilation.[31]

In the later years of the Eisenhower administration the emphasis on termination abated, and when the Kennedy Administration entered office, it conveyed to the Indians its desire for reversal of the termination policy. A special task force, appointed to investigate the status of Indian affairs, addressed itself to bilingualism in Indian education but did not provide a very strong case for it.[32] It asked only that the BIA make a special effort to keep abreast of the latest developments in language training and instruction and carry on in-service training programs in conjunction with local universities.

Two major pieces of legislation were passed in 1964 and 1965 which had important implications for Indian education: the Economic Opportunity Act[33] and the Elementary and Secondary Education Act.[34] The Elementary and Secondary Education Act made education a matter of national policy and priority for all disadvantaged youth. Additional monies were provided to the Bureau of Indian Affairs, and special innovation centers were set up to develop new educational methodologies for Indians. That something new was required was clear. The country's Indian educational policies were reflected in the following statistic: In the 1800's, the Cherokees had an educational system which produced a "population 90% literate in its native language and used bilingual materials to

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27. Adams, **op. cit. supra** note 170, at 91.

28. S.L. Tyler, **Indian Affairs: A Work Paper on Termination with an Attempt to Show Its Antecedents** 22 (1964).

29. House Select Committee to Investigate Indian Affairs and Conditions, **Rep.** 11 (1944).

30. **Indian Education** 159.

31. H.R. Con. Res. 108 (83rd Cong., 1st Sess.).

32. Bilingualism in education, off-reservation boarding schools, and termination were not necessarily at odds although in practice they were seen that way. The most notable experiment in bilingual education in an off-reservation boarding school (which in practice was linked to relocation) was the special Navajo education program which began in 1946 at the Sherman Institute in Riverside, Calif., L. Coombs, **Doorway Toward the Light** (1962).

33. Economic Opportunity Act of 1964. Public Law 88-452, 78 Stat. 508.

34. Elementary and Secondary Education Act of 1965. Public Law 89-10, 79 Stat. 27.

such an extent that Oklahoma Cherokees had a higher English literacy level than the white populations of either Texas or Arkansas;" today "40% of adult Cherokees are functionally illiterate."[35]

The Economic Opportunity Act provided for a number of programs which benefitted Indian education such as Headstart, Upward Bound, VISTA, and most significantly the Indian Community Action Programs which resulted in schools coming increasingly under Indian control. For example, the Rough Rock School in Arizona is run by an all-Navajo school board, and weekly school board meetings are conducted in Navajo. Two of the school's operating concepts have special significance for this essay: (1) English must be taught as a second language to Indian children, but it must not be regarded as something they should learn immediately through mere exposure; and (2) the schools should help transmit to the young the culture of their parents.[36]

The culmination of these activities was President Lyndon Johnson's Message on Indian Affairs delivered to Congress on March 6, 1968. The statement placed the highest priority on the improvement of education for Indians and the control of Indian schools by Indian school boards. It also stressed the use of Indian native language as the language of instruction.

> These schools will have the finest teachers, familiar with Indian history, culture, and language—feature an enriched curriculum. . .a sound program to teach English as a second language.[37]

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35. **Indian Education** 19. The point in the text is well taken. However, it should be noted that the Cherokees were far from typical. They were the only tribe which had developed a written language.

36. **Indian Education** 177. For some pertinant questioning of the effectiveness of the Rough Rock experiment see Coombs, "A Summary of Pertinent Research in Bilingual Education" in Univ. of Alaska, **Rep. of Conference on Bilingual-Bicultural Education for Alaska Native Youth** 32-38 (1969). Statistical data collection on language ability of six year-old Navajos has begun. Spolsky, "Navajo Language Maintenance: Six Year Olds in 1969" in Univ. of N. Mex., **Navajo Reading Study** (1970).

37. H.R. Doc. 272 (90th Cong., 2nd Sess.) at 5. President Nixon's message on Indian Affairs, the most liberal statement of Indian policy ever made, although it stressed Indian education and its control by Indians, did not mention the subject of language. Message from the President of the United States transmitting Indian Policy. H.R. Doc. No. 91-363 (91st Cong., 2nd Sess.).

Two Statements on Bilingualism

Bruce A. Gaarder and TESOL

On May 18, 1967, Dr. Bruce Gaarder, chief of the Modern Foreign Language Section, U. S. Office of Education, presented a statement on bilingualism to the Special Subcommittee on Bilingual Education, Committee on Labor and Public Welfare, United States Senate. Because of the impact that this statement has had on promoting new programs in this country, we are presenting here a brief summary of his arguments in support of the bilingual approach. Limited space has made it necessary to condense the original text.

1. If English is the sole medium of instruction, the children are likely to become retarded in their school work to the extent to which they are deficient in English.

2. A strong, mutually reinforcing relationship between the home and the school make it necessary that the mother tongue be used by some of the teachers, and as a school language.

3. Language is the most important exteriorization of the self. Rejecting the mother tongue can be expected to affect seriously and adversely the child's concept of his parents, his home, and of himself.

4. The child's unique potential career advantage, his bilingualism, will have been destroyed if he has not achieved reasonable literacy in his mother tongue. It will be almost useless for him for any technical or professional work where language matters.

5. Our people's native competence in other languages and the cultural heritage each language transmits are a national resource that we badly need and must conserve by every reasonable means.

Dr. Gaarder's statement was responsible for more than promoting interest in and direct support of bilingual education. His specific recommendations for implementing new programs have also influenced the design and approach of many of the new programs. His five recommendations are given here in direct quotation:

1. That comprehensive programs of bilingual education in self-selected schools and for self-selected pupils at all school grade levels be supported.

2. That the opportunity to profit from bilingual education be extended to children of all non-English-speaking groups. All are now losers under our present educational one-language policy: at worst they become hopelessly retarded in school; at best, they lose the advantage of mastery of their mother tongue.

3. That adequate provision be made for training and otherwise securing teachers capable of using the non-English tongue as a medium of instruction.

4. That there be provision for cooperative efforts by the public schools and the non-English ethnic organizations which have thus far worked unaided and unrecognized to maintain two-language competence in their children.

5. That provision be made for safeguarding the quality of the bilingual education programs which receive financial assistance.

The second important statement on bilingual education was formulated by the *Teachers of English to Speakers of Other Languages* (TESOL), a professional organization for those concerned with the teaching of English as a second or foreign language. This statement was made in the form of a resolution adopted by the general membership of the organization at the annual TESOL convention held in New Orleans March 3-7, 1971. It was transmitted in the form of a letter to Rogers Morton, Secretary of the Interior, by James E. Alatis, executive secretary of TESOL. The following is the resolution the teachers adopted:

"Whereas we recognize that any human being's language constitutes his link with the real world, and

"Whereas we are collectively engaged in teaching another language to human beings who already possess a fully articulated and developed linguistic system,

"Therefore, be it resolved that TESOL affirms

1. That bilingual education must be assumed to mean education in two languages;

2. That this in turn presupposes full recognition by every available means of the validity of the first language;

3. That such recognition includes positive attitudes of all teachers and administrators toward the student's language:

4. That the validity of that language not only as a communication system but as a viable vehicle for the transfer and reinforcement of any subject content in the classroom must be central in curricular policy; and

5. That, where numbers of individuals justify such concern, the student's own language must specifically constitute a segment of the curriculum."

The contents of this broad resolution should help greatly to dispel the widespread notion that there is, by nature or by design, a professional rivalry between proponents of bilingual education and teachers of English as a second language. Any viable bilingual program for students whose mother tongue is not English obviously depends on the continuous assistance of a professional ESL (English as a Second Language) program.

The above TESOL resolution shows that professional teachers of English as a group welcome the recent developments in bilingual education, that they recognize the solid grounds on which it is based, and that they are anxious to offer their professional assistance to any bilingual venture that will benefit students.

A SUMMARY OF PERTINENT RESEARCH IN BILINGUAL EDUCATION *

by L. Madison Coombs

Introduction

At the outset I must forewarn you of several limitations and characteristics of this paper. First because the group assembled here is a relatively small one and because its members are known to each other and share a common interest and body of experience the tone of the paper will be informal. It will be less concerned with scholarliness than with relevant communication. Second, those who may expect the presentation of the findings of a large body of carefully controlled research, precisely stated, will be disappointed. One of my principle conclusions is that very little such research has been done. Rather, the paper will attempt a survey of the events and the opinion relating to bilingual education over the period of the last several years, particularly as it relates to the education of Indian Americans and Alaskan natives.

The facts are that bilingual education has been close to the storm center of the ongoing revolution in American education. That revolution, including the Nation's new found awareness of the severe and peculiar educational problems of its disadvantaged minorities, no doubt flowed from the school desegregation decision by the Supreme Court in 1954 or at least was triggered by that historic decision. It brought into sharp focus the changes made by anthropologists and linguists for a good many years; that American schools had done a miserable job of teaching languages, including the teaching of English to children whose first language was something else. This, of course, included a high proportion of Indian and Eskimo children. The anthropologists and linguists had, over the years developed a considerable head of steam over what they considered the insensitivity, obtuseness, and arrogance of educators toward the importance of indigenous cultures, including language. The educational revolution gave them the ascendancy and educators went on the defensive.

Harold Howe (15), U. S. Commissioner of Education, signalled a fundamental change in emphasis in his testimony before the Subcommittee on Education of the House of Representatives on the Bilingual Education Act in June of 1967:

> MR. HOWE. Let me observe also in response to something Mr. Scheuer said earlier in the hearing, I was very interested that he made the point that the melting pot is no longer the image of the United States in regard to groups coming from other cultures. I would like to second that point, and put another image in the picture, if I may; perhaps a better image than the melting pot. It is the image of the mosaic, which has a great variety in it, and which gains its strength from the variety.

The persons quoted in this paper for the most part have had an active interest in the education of Indian Americans. Most of them are personally known to me and many of them are no doubt known to you. Whether one agrees with them or not what they have to say is relevant to the subject of this conference.

David Brinkley said the other day that in the emotionally changed times in which we live the political and social commentator has no chance to be objective, for to be so would make him a vegetable; he can only be fair. Maybe so, although I had tried to retain some faith in the possibility of objectivity; at least I will try to be fair.

The Anthropological and Linguistic Point of View

I have mentioned the strongly held views of the anthropologists and linguists concerning the importance to the child of nurturing and dignifying his native tongue and the adverse effects of ignoring or denigrating it. This needs to be spelled out more definitely by quoting a few authorities in the field. There could be an almost endless list of such quotations and, indeed, it will be a recurring theme throughout this paper. There has been no more impassioned spokesman for this point of view than Dr. Bruce Gaarder (11), Chief of the Modern Foreign Language Section of the U. S. Office

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*This paper was prepared for and presented at a bilingual planning conference for an Eskimo-English program, in conferences sponsored by the Juneau Area of the Bureau of Indian Affairs at the University of Alaska, College, Alaska, Nov. 1969.

of Education. Gaarder testified at the House bilingual education act hearings as follows:

> Every child is harmed if he loses full use of his mother tongue.
>
> Mr. SCHEUER. I wish Chairman Pucinski were here to hear your words.
>
> Dr. GAARDER. Every such child is in some measure harmed. Now let us consider a child such as the Spanish-American or Puerto Rican. He is not only cheated of his language but he is damaged scholastically.
>
> The Spanish-American child and children like him who come to school with an inadequate knowledge of English to begin with and who are there in large numbers cannot learn the substantive content of their schooling fast enough to stay up with native speakers of English. Therefore, they become retarded.
>
> They are cheated out of the language and they are damaged scholastically.
>
> When you come to the Indian child, given what seems to be the fact that he cherishes his Indian status to a remarkable extent, and given the fact that his cultural patterns are markedly different from those of the dominant American group, he is not simply cheated out of a language that does not matter internationally anyway, he is not just damaged in school: he is almost destroyed.
>
> As a matter of fact, historically, that is what we tried to do with them: destroy them. All you have to do is read the accounts to know that.

Commissioner Howe (15), while lukewarm in his support of the bilingual act because he feared that it would discourage the proper use of Title I of the Elementary and Secondary Education Act, was fully supportive of the bilingual point of view:

> A small child entering a school which appears to reject the only words he can use is adversely affected in every aspect of his being. He is immediately retarded in his school work.

Congressman Augustus F. Hawkins (14) of California, testifying in support of the bilingual education bill, said:

> "The most signal failure in American education," states Monroe Sweetland, consultant for the National Education Association, "is our failure to provide equality of educational opportunity for the non-English speaking child." Tragic statistics bear out the fact that our schools have failed in the vital area of providing equal educational opportunities for the child from a non-English speaking background.

The Educationally Disadvantaged Indian Student

Few facts have been better documented than the educational disadvantage suffered by Indian Americans. Dr. Brewton Berry (5) of Ohio State University, in a recent definitive bibliography of research in Indian education, has summarized the achievement deficit of Indian students, pp. 18 to 25. Briefly, Indian students do fairly well by comparison with the national norms until the intermediate grades and then fall progressively farther behind until by the 12th grade the deficit is typically from 2 to 2.5 grades. Several recent studies, however, give us increased understanding of the school achievement of Indian children and youth and will be of special interest to Bureau of Indian Affairs educators.

The study of Equality of Educational Opportunity conducted by the U. S. Office of Education in 1965 and reported by Coleman (8), et al. in 1966 has been followed by a series of technical notes prepared by the Office of Education in further definition of the Coleman data. Technical Note Number 53 by Okada, Stoller, and Weinfeld (21) shows that *all disadvantaged* minority groups in the country experience the same educational deficit in varying degrees. To the surprise of many, Indian students were not at the bottom of the barrel.

> The White students are between 3 to 4 test points above the national means for all 3 tests and at all 3 grade levels. The Oriental-Americans approximate the national mean for 2 of the 3 tests and substantially exceed the national mean in the mathematics test for the 9th and the 12th grades.
>
> The remaining minority groups are all substantially below the national mean; they exhibit, however, very similar characteristics over subject matter. For example, for all 3 tests, the Mexican-Americans are constantly between 8 to 10 test score points below the national mean for all grades. The American Indian and Negroes show the characteristic decreasing learning rates although at much different absolute rates, i.e., the Negro curve has a much more rapid decline. The Puerto Ricans are the only group which exhibit an increasing rate of learning over the grades (in 2 out of 3 tests).
>
> Among the minority groups (except Oriental-Americans), in terms of rank comparisons, the American Indians show the least drop measured from the national means—followed very closely by the Mexican-Americans. The Negro test scores are higher than the Puerto Ricans or Mexicans in 2 out of 3 tests at the 6th grade level, but by the 12th grade, the Negroes are the lowest of the minority groups.

Nor, apparently, is the low academic achievement of Indian or Eskimo students solely the result of their attending Federal schools, or boarding schools. Herbert K. Smail (24), et al, in a remarkably forthright but little publicized study of graduates and dropouts from Lathrop High School here in Fairbanks, Alaska reported the following findings:

> A definite dropout problem existed among the native students. The percentage of natives dropping out of school before graduation was two and one-half times as great as the non-natives.
>
> Native students who came from small towns and villages had more difficulty with high school subjects than the native students who had lived in the larger towns and were more closely associated with the dominant culture for the major portion of their lives.
>
> A greater percentage of non-native graduates went to college or universities than native graduates while twice as great a percentage of the natives obtained a trade or technical education as did non-natives.
>
> The percentage of natives who had failing grades was twice as large as non-natives.
>
> A significant difference was evident between the native graduate and the non-native graduate. The native's grades were much lower than the non-natives.

While the following findings are not particularly relevant to this paper, they may be of interest to members of this group:

> Native students who attended Bureau of Indian Affairs schools during the majority of their elementary school years received better grades in high school than did those from any other classification of school system.
>
> A native student entering Lathrop High School had a better survival rate if he received the majority of his elementary education in a Bureau of Indian Affairs school or an independent public school than if he came from any other type of school. In the years studied (1964-66) a student transferring from a state-operated rural school had the least chance of graduating.
>
> Native students who graduated and received the majority of their elementary education in Bureau of Indian Affairs schools tended to have a better understanding of the English language and received higher grades than from any other type of school.

> If a native attended a Bureau of Indian Affairs school his chances for higher grades in Lathrop High School were better than if he attended an independent public school, private school or state school.

The Importance of Pre-School Language As a Determiner of Achievement

The assumption that a pre-school language other than English has a depressant effect upon school achievement is almost universal. I, myself, have expressed this assumption frequently. I and my colleagues (9) at the university of Kansas in reporting on our study of the school achievement of Indian and white students in 1958 said:

> Investigation of the data reveals an amazingly consistent relationship between the degree of Indian blood and pre-school language on the one hand and level of achievement on the other. With only one notable exception, the smaller the amount of Indian blood in a group and the greater the amount of English spoken prior to school entrance, the higher the group achieved. Stating it another way, the higher achieving race-school groups contained fewer full-blood pupils and more pupils who spoke only English, or at least a combination of English and some other language, prior to school entrance.

This kind of finding, of course, is a good example of "concomitance without proof of causation" and a causative relationship must be inferred. The inference is so attractively logical as to be almost irresistible; however, research which controls for other possible causative variables is almost completely lacking.

If pre-school language is as important as most people think it is, a high proportion of Indian and Eskimo youngsters are affected by it. Bass (2) in progress reports on an on-going study of high school achievement which the Southwestern Cooperative Educational Laboratory is doing for the Bureau of Indian Affairs, reports that of the Indian and Eskimo students studied about two-thirds stated that English was *not* the language commonly spoken in their homes. Somewhat inconsistently at least two-thirds of them reported that they spoke English when they started to school but one may be fairly confident that many of them spoke a very limited brand of English. Juneau Area students, incidentally, reported 37 percent coming from homes where English was the normal language of communication but 87 percent speaking English when they started to school.

Though it does not seem to have drawn much attention, the data in the Coleman (8) study are most intriguing in one respect. While Mexican-American, Puerto Rican, and Indian-American students, three groups containing a high percentage of students with non-English speaking backgrounds, all achieve well below white students and the national norms, Negro students, nearly all of whom had English as a first language, are the lowest achieving group of all. And Oriental-Americans, many of whom, especially Chinese, come from homes where adults at least habitually speak a language other than English, achieve close to the national norms.

The answer, no doubt, is that there are other factors which powerfully influence school achievement. Bernard Spilka (25) and John F. Bryde (7), psychologists at the University of Denver and the University of South Dakota, respectively, lay great stress on the negative effects of anomie, which they describe as cultural normlessness, and personal alienation of Indian youth from white society.

No one except practicing educators seem to attach much importance to the effects of cultural and geographic isolation which seems bound to produce huge experiential deficits.

Indian Attitudes Toward Learning English

I do not mean to suggest that any very conclusive evidence can be brought to bear on the question of how Indian people themselves feel about learning English. It is so often implied, however, that Indians are being taught English against their will or that formal instruction in Indian languages is being withheld from them against their wishes that I think we need to address ourselves to the question even though briefly. It is my belief, based largely upon personal observation, that it is non-Indian rather than Indian people who feel most deeply on this question and are most vocal about it.

Berry (5) quotes Klukhohn and Leighton in the 1962 edition of *The Navajo* as follows:

> The principal conscious educational goal expressed by Navajos today seems to be the ability to use English. They realize that without it they are at a disadvantage, and they have discovered the usefulness of communications and records in writing. At the same time, English is so different from their own language, that it is very different for Navajos to learn***. The children work at it and are much more likely to practice it among themselves—on the playground for example—than are Pueblo pupils.

He also cites the following statement by Clarence Wesley, Chairman of the San Carlos Apache tribe:

> I suspect that failure to comprehend on the part of the Indian children accounts in large measure for the lessening of interest and enthusiasm for school which I am told begins for Indian children along about the fifth grade. * * * I would insist upon the employment of teachers especially trained in the skills of teaching English to non-English-speaking youngsters.

Of special interest and perhaps significance are the feelings on the subject expressed by high school graduates in separate but related studies reported by Selinger (23) and Bass (1). Six hundred seventy one Indian high school graduates, 287 from six northwestern and north central states and 384 from six southwestern states were asked whether they thought it was imporant to Indian students to be able to speak their native Indian language. About 85 percent of the southwesterners thought it was important with the rest thinking it was not or having no opinion. However, of those who believed it was important, well over half valued it mainly as a means of communication, especially with the older Indian people. About one-third of the students attached importance to the Indian tongue because of pride in heritage. Of the students from the northwest, about one-third thought learning an Indian language was of no importance. Of the remainder who did, more than half of them valued it mainly as a means of communicating with the older generation or getting a job.

While I do not contend that Indian youth are indifferent to their native culture and language, I believe their feelings about it are less intense than their desire to acquire skills which will permit them to do well in the major culture. Whether I am correct or not, it by no means settles the questions about the most effective ways to teach English with which we are concerned in this conference.

The Central Issue

While it is my hope that the foregoing will provide some useful background for the work of this conference, I have not yet broached the central issue in bilingual education. The central issue is, "What constitutes bilingual education?" Gaarder (11) in his testimony before the House Sub-Committee sought to make the answer very clear:

> Now we come to bilingual education, a term which is not too widely understood. It is not simply teaching English as a second language, although English must necessarily be taught and necessarily as a second language because the child already has a first language. Bilingual education is the use of two language mediums to teach any part or all of the school curriculum except the languages themselves.
>
> In any bilingual education program we would hope that English would be taught better than it usually is to non-native speakers. English could indeed be taught much better.
>
> Bilingual education could make a great contribution to the Indian child. Let us say that he is a Navajo in a school in which half of the teachers are Navajo speakers and half of them are English speakers. The Navajo teachers, during half of the day, present the entire curriculum through that language. The English-speaking teachers, using their own mother tongue, present the entire curriculum through that language during the second half of the day. Since the child understands Navajo perfectly, there is no mystery about the informational content that is going from teacher and book to pupil. The child learns English, but English is not being asked to carry a burden that it can't carry at that time. The main cause for the child's retardation in school is removed. He has complete access to everything through his own language.

He went beyond this to make a case for the feasibility, indeed the unique suitability, of teaching literacy in Indian languages:

> The point here is that any time we develop a writing system for one of these Indian languages—give and take some special problems that I cannot forsee—it would be a perfect fit. It would be a romanized alphabet done scientifically. Therefore, reading it, learning to read in that language, learning all the mechanics of reading would be immensely easier for the Indian child than it is for the normal English-speaking child to learn to read English. Such a reading system for one of the Indian languages makes an exceptionally promising bridge to English.

And finally he cited a school where it is happening:

> There is one experimental school for American Indians which incorporates many of the features which I am advocating here. It is the most promising thing in Indian education, the Rough Rock School at Chinle, Arizona.

We will hear about the Rough Rock Demonstration School in much greater detail in this paper because to a great extent it capsulizes the issues. Dr. Donald A Erickson (10) of the University of Chicago earlier this year, under a commission from the Office of Economic Opportunity, completed an exhaustive, although inevitably controversial evaluation of the Rough Rock Demonstration School. A component of that report is a section by Dr. Oswald Werner (27) of the anthropology department of Northwestern University. Werner is even more explicit in his definition of bilingual education than Gaarder:

> Regardless of one's stand on the issue of how or with whom Navajo children are competing, there is increasingly compelling evidence that the best predictor of success in the national language is mastery of the native language.
>
> Some degree of bilingual education can be justified on the grounds that being exposed to two lexically, syntactically, and phonologically coded systems provides the student, in a sense, with stereo (binocular, binaural) vision of his and the second language he is acquiring. A bilingual school, however, goes far beyond "some degree" of bilingualism:
>
> *A bilingual school* is a school which uses, concurrently, two languages as medium of instruction in any portion of the curriculum (except the languages themselves). In this sense the only bilingual school on the Navajo Indian Reservation or in Indian Education is at Rough Rock Demonstration School. This is a fact totally independent of what RRDS does, or how well it does it, or how well other Indian schools do, whatever they are doing. "The teaching of a vernacular solely as a bridge to another, the official language is *not* bilingual education in the above sense, nor is ordinary Teaching English as a Second Language.
>
> Bilingual education tries to capitalize on the natural ability of the child to learn languages easily. The young child learns a second language quickly and effectively if it is an unavoidable means to his full time involvement in all the affairs of *his* life. Much less than full time involvement will suffice for him to learn the new language. The optimum time for the child's involvement in the learning of a second language is not known. Short periods must be programmed sufficiently close to each other to be reinforcing. At the Miami Corral Way School the schedule through the sixth grade is as indicated . . . . This schedule compares favorably with the proposed bilingual schedule for Rough Rock . . .
>
> Every effort should be made to provide education in the native language. Students should start their schooling in the medium which they understand best. Adding the native language to the curriculum is the only safe measure to avoid the intellectual retardation observed in children with a second-language handicap. The age between five and seven, sometimes extended to three to eight, is crucial for intellectual development because the child learns increasingly to use his language for problem solving tasks. One of the strongest justifications of bilingual education is to keep one intellectual channel patent while the other one is developed. This is

> another way of saying that the child's progress should be from the known to the unknown. It makes no sense to knock his props out before he has a strong foothold. This is perhaps most crucial in the span of years mentioned above. After this age, the *social* functions of the native language may increasingly become the deciding justification for the continued maintenance of bilingual education throughout the educational process. This is properly recognized by the newly established Navajo community College and its program to teach Navajo on the college level, even to Navajos who have apparently lost their ability to speak Navajo.
>
> For the primary and pre-primary child, problem solving in the second, weaker language is more difficult. The most conclusive demonstration comes from Irish schools observed by MacNamara. Children with English as their first language subjected to Irish Gaelic instruction had greater difficulty solving arithmetical problems presented verbally. Their mechanical ability to calculate did not seem to suffer.

For a good many years now the Bureau of Indian Affairs has tried to articulate its support of such principles as the use of linguistic science in the teaching of English as a second language, the dignifying of native culture and language, the employment of as many teachers of Indian ancestry as possible, and the production of learning materials relevant to Indian culture. It has spent a good deal of time parrying accusations such as its punishing children for speaking an Indian language or a general denigration of Indian culture. It has contended that such charges are anachronistic, going back to an earlier and less enlightened era, and has pointed out that during the 1940's particularly, a great deal of work was done in preparing bicultural education materials, many of which were bilingual. From 1964 to 1966 it played a significant if not leading role in the establishment of a professional organization known as TESOL (Teachers of English to Speakers of Other Languages). It has mounted a strong ESL (English as a Second Language) program on the Navajo Reservation and a significant one in Alaska—although I think it must be said that it has not done much elsewhere except in a few local situations, such as the Choctaw Reservation in Mississippi. It has added an ESL specialist to its Washington Office staff, has fostered the development of some of its teachers in this field in Alaska and on the Navajo, and has hired as consultants the Center for Applied Linguistics, a national organization, and experts from UCLA, the University of Southern California, the University of Arizona and elsewhere.

None of this or all of it put together meets the definition of bilingual education as laid down by Gaarder and Werner or many of their colleagues who might have been quoted.

Did Bureau of Indian Affairs officials have some reason for believing they had the support of linguists when they launched their current ESL programs? They may have thought so. In 1967 Miss Sirarpi Ohannessian (20), representing the Center for Applied Linguists, issued a report on *The Study of the Problems of Teaching English to American Indians.* In it she said in part:

> At present the education of the Indian student depends to a very great extent on how effeciently he is taught English and how well he is able to learn it. Since all his other subjects will have to be learned through its medium, in a sense all his teachers are teachers of English.

Also:

> Many more Indian children are said to start school knowing some English at present than did a decade ago. Interference from the students' native languages is the most prevalent and obvious problem, but interference from non-native English learned from parents by first generation monolinguals in the language, lack of vocabulary and experiental background, and the often highly artificial usage of English in the classroom may be regarded as additional problems.

However, she also sounded the linguist's characteristic warning:

> The second (assumption) is that at present a better understanding of linguistic and cultural relativity, among other factors, has resulted in a greater respect for and sympathy towards the language and cultural heritage of minority groups in the United States. It must be stated again that Indians are not immigrants to

> this country, the setting of their cultural heritage is still where they live today, and their problems are not the same as those of immigrant groups.

Lois McIntosh (17), writing in the first newsletter which the Center for Applied Linguistics produced for the Bureau of Indian Affairs, *English for American Indians*, Fall, 1968, said:

> The greatest need of the Indian child, who brings to his early school life his first six or seven years of experience and training in a different language and culture, is probably an adequate command of American English, the language in which he will be formally educated. (Bilingual education, increasingly advocated by thoughtful educators, has not yet fully been developed. It will be some time before Indian children can be educated in both their first and second languages, with the beneficial results of membership in the best of two worlds.)
>
> It is up to us, as teachers of the second language, the school language, American English, to make sure that the learner's introduction to the progress in this new tongue will be as effective as we can make it.

In October of 1968, however, Ohannessian (19), reporting the conclusions and recommendations of a planning conference for a bilingual kindergarten program for Navajo children, struck a somewhat different note, possibly reflecting the opinions of other consultants who had been called into the conference:

> The conference was in complete agreement in its endorsement of the concept of bilingual kindergartens for Navajo children. The importance of beginning the child's education in his own language and in his own cultural background, building a sense of security and pride in his own culture, and the need for strengthening this sense of pride were stressed again and again during the conference. Indeed, the conference felt that to be truly effective bilingual education should be extended into the elementary school, though it was realized that attempts to use Navajo at higher levels might increase the already existing problems in the use of Navajo as a medium of instruction, the teaching of Navajo to those who are monolingual in English both in purely Navajo and mixed schools, and the preparation of materials and teachers for instruction in and through the medium of the Navajo language.
>
> . . . . Although some participants felt that there was considerable evidence that Indian parents appreciate bilingual education for their children, others felt that there was insufficient information on what Indian parents really thought on the subject and that further documentation and self-evaluation of the community were needed.
>
> . . . . Members of BIA present assured the conference of the Bureau's policy that bilingual kindergartens would operate only in areas where they were requested by the local chapter, school board and parents and would be entirely voluntary.
>
> . . . . There was general agreement with the policy that most kindergarten activities should be conducted in the language of the child at the start of the program, and that this language should be the main medium for activity throughout the program. It was also agreed that oral English should be introduced and taught as an integral part of the program in preparation for transition to the English medium instruction which obtains in both state and BIA elementary schools at present. The proportion of Navajo and English to be used for kindergarten activity was discussed, but no conclusions were reached since it was felt that this would depend to a large extent on local circumstances including the amount of English already known by children, the needs of the community, the wishes of parents, the availability of staff and materials, and other considerations.

Two Positions On The Issue

I think it would be fairly accurate to say that the issue has evolved in such a way as to put the social scientists and linguists on the one hand and the educational practitioners on the other into two separate but not altogether hostile camps. Many school people today, if they have gone into the matter

very deeply, would be willing to concede that initial instruction in the native Indian language or dialect, or concurrent instruction with English, might get better results but they have not been shown very impressive empirical evidence to that effect. But beyond that they feel that such considerations as shortages of qualified teachers who are competent in the native language, and the ambivalence of native people themselves on the question make the effort impractical in terms of either time or money. Many also feel that if an error was made at some time in the past the hour is now too late to reverse it.

The linguists on the other hand concede that the obtaining of enough suitable bilingual teachers would be a problem although they have little patience with the educator's rigid certification requirements. They also believe that with a crash effort materials and programs could be developed fairly rapidly. They suspect that the present situation, having been caused by the insensitivity of educators and the general public in the past, continues because of "foot-dragging" and lack of conviction. I do not mean it to sound snide when I say that most scholars have not experienced the trauma of trying to get public appropriations which most public administrators haved endured.

Perhaps the differing emphasis can be well illustrated by statements made by our good friend Don Webster (26) and our own Bill Benton (4) at the workshop held in Anchorage two years ago this coming January.

Mr. Webster said:

> Native languages are the most functional media for their way of life.
>
> The human mind is not like a sponge—having a saturation point with one language. Rather, the more it is used, the more it can be used. The more languages one speaks, the easier it is to learn yet another.
>
> "When I know how to talk English and Eskimo, it's like having two heads." (Eskimo Elder)
>
> "We should not attempt to impart a disdainful attitude toward the Native language and culture of the students. Linguistics and anthropology are clear with regard to the worth of each. Our goal should be to make the students bilingual and bicultural rather than merely having them switch language, culture, and allegiance to their traditions." (Robert Lado)
>
> The acquisition of a second language need not supplant the first. Rather, true bilinguals are said to have acquired two coordinate systems.

Mr. Benton's comment was:

> Language is the central element in any culture. It is the vehicle through which the culture is expressed. It cannot be disassociated from the culture in which it exists. If, then, the Indian or Eskimo or Aleut child is to become capable of competing in our culture, a mastery of English is a very necessary part of equipping him for the competition. I don't mean that he should adopt our culture whole hog. Certainly there are elements of both cultures which are desirable. I also do not mean to imply that he should forget his Native language. There is experimentation going on in teaching the Native child in his own language for part of the day. Perhaps this will prove to be a better method of education. That remains to be seen. Right now, however, we have neither the teachers nor the materials to teach the native child in his own language so, until we do, English must be the language of instruction.

The International Perspective

In August of this year an international conference on Cross-Cultural Education in the North was held in Montreal. Seven circumpolar countries - Denmark, Sweden, Norway, Finland, the Soviet Union, Canada, and the United States, were represented. A number of persons who are here today

were delegates. It was my privilege to serve as chairman of one of six discussion groups. While it cannot be said that consensus was reached—indeed, none was sought—clear focus was achieved on several points. Chief among these were: 1) a role for minority groups in decision making concerning the educational programs which serve their children and, 2) bilingual education, including instruction in the native language. Four nations were represented in the group I chaired: Denmark, Canada, the United States, and the Soviet Union. Delegates were, for the most part, social scientists and school officials. It seemed to me that, for the most part, opinion divided among the group much along the lines I have described in the preceding section. Canada's experience has been much the same as ours and Denmark is engaged in implementing in Greenland a bilingual education program enacted in 1967. The situation of the Soviet Union has been different. A generation or more ago they did for their northern ethnic groups what many are now advocating we should do - or certainly should have done. But the Soviet delegate, a member of the Politburo and the Presidium, made it clear that their principal goal was competence in the national language. I believe that some quotations from papers prepared by various delegates will be of interest to you.

Miss Inez Boon (6) of the University Press in Oslo, Norway, was one of the most fervent advocates of the anthropological-linguistic point of view:

> The language problem is old, and since a long time this problem has called forth struggle. A historic review shows that between 1710 and 1870 there were shorter periods with cultural humaneness and good will on the side of the authorities. However, from 1870 until the last world war the authorities tried to "Norwegianize" the Lapps in a very hard way, and the Lappish language was absolutely forbidden in the school.
>
> The Lapp parents considered the school an unnecessary evil. According to their opinion, the children learned next to nothing there. On the other hand the children did not get the opportunity to learn the far more important and useful things which their parents could have learned (sic) them in the same time at home.
>
> . . . . However, from the year 1963 a big change of mentality took place. At first with the authorities, later with the Lapp population. The most important feature of the attitude of the authorities was that they recognized that it was impossible that a harmonic development and an effective information could take place without being connected to Lapp language and culture.
>
> . . . . It was stated by law that the Lapp language could be introduced at the elementary school, both as a teaching language and as a subject.
>
> . . . . Moreover, one is planning a special bilingual course at the teacher training seminar in Tromso, which is to prepare teachers for their work in bilingual districts.
>
> . . . . Slowly, however, mistrust and misunderstanding seem to disappear. Among others the teachers have contributed to this by developing an intensive informative activity—e.g. about the advantages the use of the mother-tongue during the first school year is supposed to give for a more efficient teaching during the whole school period. In 1967 the first experiment with teaching reading, writing and arithmetic through the mother-tongue only, was started. The Norwegian language was used only half an hour every day, and only for elementary oral exercises.
>
> . . . . Already after one year the experiment showed to be successful. Today many parents send their children to classes where the mother-tongue method is used. They did not only find out that their children performed better than children did before them, but they also found out that the children liked to be at school and were really interested and engaged in what was going on in the classroom.

It will be noted that Miss Boon's evaluative comments concerning the success of the program she described are extremely casual and sketchy. One gets the impression that she really felt they were unnecessary, so convinced is she of the rightness of the program.

Miss Chislaine Girard (12) of Canada, in describing a bilingual education program started by the

Province of Quebec for Eskimos and Indians in its northern latitudes, reveals an ideology and a zeal similar to Miss Boon's and, like here, pretty much ignores any evaluation of the "outputs" of the program. Her paper will be worth reading when it becomes available to you, as it will, for she deals in some detail with what was done about the training of teachers and the development of materials:

> It has been underlined that it was necessary for the child to be instructed first in his own language because this language is for him the only way of learning to understand and express his environment.
>
> . . . . In 1962, following a survey of the situation, the Government of Quebec decided to commit itself deeply and globally in its Northern territory with special respect to Eskimo and Indian Affairs in this region.
>
> . . . . "For the child, language develops at the same time as the frames in his conceptual thought and his first structures of logical thinking; even if language is not a *sine qua non* condition of thought, it is its precious auxiliary at different steps of its evolution. The sooner the child can acquire an easy manipulation of verbal expression, the sooner he will be free to benefit from the use of this precious tool in all the fields of its social and intellectual adaptation." To ask the child to learn a second language at this moment in his development, would be to limit him to the discovery of his personality and his milieu. It would also retard, if not prevent him from reaching mastery of verbal expression in his own language.
>
> . . . . For the above reasons, it was decided that all subjects in the first cycle-kindergarten, first and second years - would be taught in Eskimo. The language of instruction in the second cycle-grades 3 to 6 - would be either French or English, with Eskimo retained in the curriculum as a subject of study. Upon completion of their elementary course in grade 6, students may register for the third and final cycle of the regular northern school system at the Regional School of Poste-de-la-Baleine, where studies include academic subjects as well as accelerated vocational options.

One of the basic background papers for the conference was prepared by Mr. Bent Gunther (13) of Denmark, Education Advisor to the Ministry for Greenland. In 1967 Denmark passed a sort of "local option" law which permitted Greenlandic communities to decide whether instruction should be in the native language. Many of Mr. Gunther's comments are typical of the public official grappling with difficult problems:

> One of the greater problems of the school in Greenland is the lack of Greenlandic-speaking teachers. This is primarily due to the fact that the training of native teachers has been unable to keep pace with the enormous increase in the number of children.
>
> . . . . The Danish Teachers' Training Act of 1966 maintains a standard training for all primary school teachers in Denmark, but in other countries many primary schools employ teachers of varying standards of training.
>
> Although it is, in many ways, an advantage that all the teachers in the primary school have received the same training, still, on the background of the difficulties already mentioned, it must be considered fully justifiable to use bilingual assistance in the school in Greenland.
>
> It is, however, important to establish the fact that these assistants are not real teachers but only tutors who are qualified to undertake a number of limited tasks in the school.
>
> . . . . As regards the placing of the subject Greenlandic a good deal of discussion was going on prior to the passing of the 1967 Act. From political quarters in Greenland was given the target: Bilingualism.
>
> The Act provides as follows: "After a parents' meeting has been held, the local School Board shall, with due regard to the necessary teaching staff able to teach

the subject Greenlandic being available at the school in question, submit to the Board of Education to what extent Greenlandic shall be taught at the school in question in the first and second school years, or whether the teaching of this subject should be postponed till the beginning of the third school year."

By this formulation it is, among other things, acknowledged that the number of Greenlandic-speaking teachers is insufficient to cover the demand.

In view of this situation the school in Greenland must, as already mentioned, to rather a great extent be expected to be based on teaching in Danish in the future.

Just to give a "world view" to school achievement, Gunther says:

Levels of Attainment. In spite of the improved educational standard, especially in the towns, the results obtained in general are still below the results obtained by pupils on the same age level in Denmark.

. . . . It appears from the investigation that the 4th and 5th grade pupils must, in general, be said to be one year behind in the subject Danish compared with Danish pupils of the same age, whereas the difference at the end of the 7th grade is given as 1½ - 2 years.

Comparative Studies

Have there been studies which compare the relative effectiveness of the monolingual and bilingual approaches to teaching English? Apparently there have been only about a half dozen. Bass, Caplan, and Liberty (3) of the Southwestern Cooperative Educational Laboratory in a proposal for A Comparative Study of Four Approaches to Bilingual Education (so far as I know the proposal, designed for the Navajo has not yet been funded or implemented) describe the following studies:

There have been relatively few studies comparing the effectiveness of monolingual and bilingual approaches. One by Grieve and Taylor (1952) in Ghana, hampered by unmatched and research-naive teachers, reports findings supportive of the bilingual approach. An important study done in the Philippines (Orata 1953), compared experimental groups using the native language as the medium of instruction for the first two years and English in the third year with control groups using only English throughout. The study reports a noticeable superiority in achievement by the experimental groups in the first two years when they were tested in the native language and the control groups were tested in English. In the third year, when both groups were tested in English, the experimental group still showed higher, but not significantly higher, achievement. The conclusions of the study have frequently been questioned because of sketchy statistical reporting, and the possible influence of the halo phenomenon.

A similar experiment was carried on in Sweden by Osterberg (1961), with children who were already fluent speakers of the local dialect, Pitean. He found that the experimental group, which was taught to read for the first ten weeks in Pitean before changing over to literary Swedish, made greater school progress than the control group taught throughout in the literary Swedish. This superiority held true at the end of ten weeks when the experimental group was tested in Pitean and the control group in literary Swedish, and also when all the children were tested in literary Swedish at the end of the school year.

A study conducted by Modiano (1966), with Indian students in Mexico, observed and studied the monolingual appreach in local, Federal, and State schools, which teach in Spanish, and the National Indian Institute Schools, which teach in tribal languages prior to teaching in Spanish. It was found that a higher proportion who first learned to read in their mother tongue became literate in the national language and read it with significantly greater comprehension than did those who had

> received all early instruction in the national language. One of the suggestions for further investigation coming out of this study is that similar research should be conducted with other groups for whom the national language is not the mother tongue.

Vera John, Vivian Horner, and Judy Socolov (16), writing in *The Center Forum* for September, 1969, have the following to say:

> But while many of the arguments put forth for bilingual education are supported by common sense and the testimony of those who have experienced the effects of having to give up their mother tongue to become educated in an English-speaking system, the relevant research in scant and is likely to remain so for some time. Given present limitations in the social sciences, a research validation of the complex interaction of language with the individual in his many roles presents a task of formidable difficulty.
>
> On the other hand, the claims for the pedagogical soundness of a bilingual approach in educating the child who is not a speaker of the national language are based on constantly accruing research evidence. A number of foreign educational institutions, drawing upon the experience of other polylingual nations, are for the first time taking a serious look at the potential of bilingual education. In addition, some limited experimentation has begun in the United States as well.

John and her colleagues then describe the Philippine, Swedish, and Mexican experiments as having results favorable to the bilingual approach; they omit the experiment in Ghana and add projects in the Coral Way School in Dade County, Florida and in the public schools of San Antonio, Texas:

> Closer to home is a noteworthy bilingual program being carried out at the Coral Way School in Miami, Florida. This program includes both Spanish-speaking and English-speaking children, and has as its teaching goal the total mastery of both languages for all children. The evaluation data now available, covering a three-year period, indicate that while the children are not yet as fluent in their second language as their first, they learn equally well in either. In addition, the results demonstrate the bilingual curriculum is as effective as the standard curriculum in all academic subjects.
>
> Another United States bilingual program in San Antonio, Texas, is achieving similar results. An experimental group of children of Spanish-speaking background, instructed in both Spanish and English during their first grade in school were able at the end of the year to read, speak and write in both languages. The children scored better on tests measuring cognitive growth, communication skills and social and emotional adjustment, than did their control peers who were taught solely in English. Tests administered at the end of the second year of their bilingual instruction indicate similar results.

Modiano (18) herself, writing in America Indigena for April 1968, describes the study she conducted in Mexico in the Highlands of Chiapas. She found the bilingual method to get better results than the monolingual method in Spanish, using both teacher ratings and test results as criteria. This study is the one most often cited by proponents of the bilingual method and I, myself, find it the most persuasive. For one thing, I suspect that the children in her study were more nearly like our Navajo and Alaskan children than those studied elsewhere. Furthermore, she deigned to submit her data to statistical analysis and found the differences to be significant at the .01 level of confidence.

In speculating concerning the reasons for the superiority of the bilingual method she suggests: 1) in performing the reading act, a greater ability on the part of the non-Spanish speaking children to attach meaning to the graphic symbols in the native language, 2) a better self image when using the native language, and 3) a more sympathetic attitude on the part of the bilingual teachers even though they were less well educated.

The bilingual program at the Coral Way School in Dade County, Florida, referred to earlier by both Vera John and her associates (16) and by Werner (27) may be of doubtful validity as a model for bilingual programs in Indian and Eskimo schools. A large proportion of the children in the project

were middle class Cuban refugees from families literate in Spanish. Also some of the refugees were professional teachers, Spanish language readers were available and there is a well-developed body of literature in Spanish. There is a full description of the Coral Way project in the House hearings on the Bilingual Education Act, previously alluded to.

The Rough Rock Demonstration School

Now finally we return to the Rough Rock Demonstration School for a closer look at the experience there. The full story of the Rough Rock School needs to be written—for it has not yet been done—but this is obviously not the place to do it. It must be said, however, that Erickson's (10) task as he set out to evaluate it was a difficult, if not an impossible one. The school had received so much national publicity, all of it laudatory, from United States Senators and the news media on down, that any criticism of its program was not only unwelcome but nearly intolerable to its chief advocates. Nevertheless, Erickson and his assistant, Henrietta Schwartz (22) approached the task with an attitude that, while completely sympathetic to the Rough Rock goals and purposes, was highly professional. As Professor Werner (27) has written a special section of the report on bilingual education, Mrs. Schwartz has written a special section on *Teaching and Learning in General.* Both of these evaluators observed not only Rough Rock but also the Bureau of Indian Affairs Rock Point School as well. In addition, Mrs. Schwartz observed at the Bureau's Chinle Boarding School. The Rock Point School had been used by the Bureau as a demonstration center for its developing ESL program on the reservation and many persons in the ESL field had a high regard for its principal and staff. Mrs. Schwartz describes the Chinle School as a "run of the mill" reservation school which may be an apt characterization.

It is not easy to synthesize or compare Schwartz's and Werner's evaluations. Werner brought to his observation the perceptions of the anthropologist-linguist; Mrs. Schwartz those of the professional educationist and master teacher.

Mrs. Schwartz was able to give much more time to the job:

> At Rough Rock, no single observation lasted less than two hours, and all teachers but two (one in the primary grades and one in the upper grades) were observed from one to five times.
>
> . . . . Eight of Rock Point's ten classroom teachers were observed, each for at least two hours and most for a day or more.

Werner, on the other hand, spent three days in all, only a half day at Rock Point where he interviewed ten students but, I gather, did not observe instruction.

They did agree that the best teaching at Rough Rock was being done by Navajo teachers in the primary grades and that Navajo teachers have a great advantage in teaching Navajo children.

Otherwise, Mrs. Schwartz clearly felt that the teaching program at Rock Point was superior. I believe her verbatim comments show this. First, Rough Rock:

> Each classroom teacher at Rough Rock was given the services of an aide, and, in the Phase I classrooms, a room mother. The aides were bilingual and the mothers were Navajo-speaking. In the classrooms of Anglo teachers, with few notable exceptions, the aides were used as clerks and messengers and the mothers as disciplinarians. There were no Navajo core teachers at the Phase II level, and only one of the Anglo teachers was fluent enough in Navajo not to have to depend on the aide to translate.
>
> . . . . Rough Rock teachers enjoyed much freedom in planning daily activities in their classrooms. There was no prescribed curriculum; the principal of the Phase I program encouraged teachers to develop their own programs. She subscribed to the philosophy that a child must be literate in his own language first, before he could successfully learn a second language. Unfortunately, not all of her staff shared her views. The planning for lessons in the Phase I program ran the gamut

- from the new Anglo teacher who played it by ear ("I just ask the kids what they would like to do each day, and we go from there") to an experienced Navajo teacher who followed a highly structured and predictable program each day.

. . . . We felt that the Navajo teachers in the beginners, kindergarten, and first year classes were the most effective in the school, primarily for two reasons: (1) they were all Navajo, and (2) all but one had either training or experience to provide the techniques necessary for teaching at this level.

. . . . There was little uniformity or structure in the TESL programs in the Phase I classes, but emphasis on language training in all of them. What we missed was any school-wide assessment of the effectiveness of one method over another, or some attempt to integrate the program from one level to the next.

. . . . One of two young male teachers interviewed felt the curriculum center should establish some long-term skill and content goals for a time period in school—two years or three years. Both young men noted their own inadequacies in knowledge of how to teach reading. They felt that most other faculty members sensed the same need. One of them said it was entirely possible for a child to go through eight years of schooling here and learn spoken languages very well, but not be able to read and write his own name.

. . . . The TESL program was conducted in each classroom by the core teacher, but without any uniform pattern in the Phase II classes. However, it did seem that students' dislike and poor performance of phonics exercises prompted teachers to give less attention to this phase of the program.

With reference to Rock Point:

In rooms where the coordinate bilingual program was being used, Anglo teachers were given Navajo aides. (There were no room mothers at Rock Point.) Often it was difficult to tell who was the teacher and who was the aide, for the aide was the teacher for the Navajo phase of the program. In one beginners class, with the help of the principal and with close cooperation between the aide and the teacher, the program was being run in fifteen-minute modules. One group of children would work at one end of the room, in English with the Anglo teacher, the other group at the opposite end of the room, covering the same material in Navajo, under the direction of the aide. At the end of each fifteen minutes, the groups would switch. The children were reminded that "in *this* part of the room we speak English; there, we talk Navajo." The effort and enthusiasm of the teacher and her aide apparently were transmitted to the children. This was one of the most exciting classrooms we had seen in years. At Rock Point, deliberate techniques were used to increase the children's attention span. When pupils became a bit restless, they were told, "Just two minutes more, and then we will have recess," or "When the clock looks like this pointing, you can go to lunch."

. . . . The older children at Rock Point were more responsive than those at Rough Rock or Chinle, though less responsive than most Anglo children of the same age. Each teacher was aware of how his program meshed with others. Some teachers maintained informal tutoring arrangements for groups of students needing help with math, reading, and science. Two teachers arranged to have students in the older class spend time after school listening to second grade brothers and sisters (actual or clan) reading and helping them with pronunciation.

. . . . The emphasis at Rock Point was on English. Students in the upper grades kept logs in which they were free to write anything they wished, so long as they wrote something each day.

. . . . There was a sense of controlled urgency at Rock Point. Teachers pushed the children and pushed themselves. Their engagement in a common task seemed to promote high morale in both groups.

Werner describes his interview with pupils at both Rough Rock and Rock Point as follows:

> The interview consisted primarily of evaluating the children's understanding of the following definition (adapted from Webster's Collegiate Dictionary): "A unicorn is an animal of the fairy tales. It looks like a horse and has a horn in the middle of its forehead."
>
> We asked questions like "what does a unicorn look like? How many horns does it have? Where is its horn? What is a fairy tale?" The test was less than successful. Children who did not respond to the English version responded equally negatively to the all Navajo version. Monosyllabic answers were preferred in both schools. One girl at Rock Point knew what a unicorn was. One boy at RRDS, we suspect, knew this too.

Werner has the following comments on the results:

> The English of pupils in an open ended casual interview seems roughly comparable at RRDS with Rock Point. The RRDS children's response is very Navajo: often less than a whisper. The Rock Point children respond louder and clearer, almost in American Middle class fashion. The main difference in the English of the two schools seems to be loudness. The higher performance demands (and/or the Bereiter-Engelman method?) placed on the Rock Point children may be responsible for this. The loudness carries over into speaking Navajo with strangers. Nevertheless the RRDS children seemed on the whole a bit more willing to speak Navajo. Both groups of children liked the teaching of Navajo in school. One child in each group had negative feelings about the Navajo language.
>
> I have no way of judging that allegedly the level of the eighth grade at Rough Rock is comparable to sixth grade elsewhere.

Earlier, we quoted Professor Werner's views on bilingual education. He has these additional comments:

> The bilingual teacher has a very simple basic unassailable advantage over the weaker second language: he can make himself understood and promote intellectual learning. I suggest anyone doubting this assertion should try to learn Navajo.
>
> . . . . ESL (i.e., the audio-lingual approach now popular on the Reservation), like other instructional methods, is unfortunately not a panacea to Indian educational problems. The RRDS bilingual approach needs special implementation of the audio-lingual approach by other methods (e.g., meaning-translation). The teacher's complaint (and students' complaints too) about the dullness and repetitiveness of ESL is serious too. This latter charge is, by the way, applicable to the ESL approach everywhere.

Finally, he has some recommendations for ESL for the Navajo:

> More scientific knowledge of the structure of the Navajo language is necessary, for example, to assess the order of difficulty of English exercises in the ESL programs for Navajo children. We do not know enough about Navajo to even guess intelligently. This is true of all ESL programs on the Reservation.
>
> The nature of ESL for a bilingual program needs to be evaluated and expanded to include the specialized requirements. Meaning-translation exercises have to be brought up to date and included as part of ESL.
>
> The chief problem of Indian education in the past was that it discouraged translation and interpretation. Audio-lingual ESL perpetuates this approach. There is a *desperate* need for interpreting Anglo culture to mature Navajos and Navajo culture to Anglos. Some parents have already noted the willingness of RRDS children to interpret. This trend must be encouraged. Nothing else will bring the Navajos smoothly into the 21st Century.

Few if any of either Werner's or Schwartz's findings are quantifiable. It remains then, only to provide a short digest of Erickson's report of achievement test data on pupils in the schools. First he reports on testing done earlier:

> Through a cooperative arrangement in May, 1968, achievement test batteries from the California Test Bureau were administered to pupils at Rough Rock, Rock Point, and two other BIA schools (elementary boarding schools at Lukachukai and Many Farms). The results for the test battery as a whole . . . are presented. In all four grades in which comparisons between Rough Rock and Rock Point were possible (Rock Point was offering only four grades at the time) Rock Point emerged as superior. In one case, the extent of the superiority was the equivalent of an entire grade-year, as estimated in terms of national norms. In the other three cases, the differences were fairly small. No tests were performed to determine which differences were statistically significant.

Erickson felt, however, that it would be more defensible to compare pupils on the basis of years spent in school rather than grade level and so after grouping the children in this way he again analyzed the scores:

> When boys and girls are considered separately in this way, Rough Rock emerges as slightly superior in one comparison out of eight; in the other seven, Rock Point is superior, though the differences are small except in the fifth year (roughly equivalent to the fourth grade) in which sizeable differences emerged.

Partly because the earlier data did not permit him to make subject-by-subject comparisons, and partly because he wanted to include the Chinle Boarding School in the study, Erickson did some testing of his own in January of 1969. To his surprise, he found no significant differences among the three schools. He comments:

> If we take the test results seriously, they are flattering to neither Rough Rock nor Rock Point in comparison with what is regarded as a run-of-the-mill BIA school. It could be, of course, that reading and arithmetic are areas of special strength at Chinle Boarding, and there is some evidence in our classroom observations, in fact, that arithmetic may have been. It is possible, further, that Chinle is much better than it is touted to be. The observations do not encourage us to think so generally, though a few teachers at Chinle Boarding were apparently very effective. It appears, then, that we must simply leave on the record an interesting, unanticipated finding. It is inconclusive and difficult to interpret in the absence of further evidence. We hope further achievement test comparisons will be conducted with Rough Rock, Rock Point, and Chinle Boarding. We would like to know what these data mean.

Conclusion

This paper has not settled the issue of bilingual education, nor was it intended to, although I hope it has illuminated it. I think it does show that this conference can keep itself usefully busy for the next three days.

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A HISTORY OF BILINGUAL EDUCATION IN BIA SCHOOLS

by

Evelyn Bauer

A combination of depressing academic achievement-test results, and an interest in innovative programs involving students that have much in common with our own, has led the Bureau of Indian Affairs to a serious examination of new approaches to educating Indian students. The most promising of these approaches is that of bilingual education, i.e., the use of some combination of the student's mother tongue and English to transmit academic content, and to foster the child's development in both languages.

We have examined Florida's Dade County program closely and feel that although many of the problems of Cuban refugee students are quite different from those of American Indians, much of what is being done can be adapted to our situation. The same is true of Thomas Horn's bilingual project being carried on through the University of Texas and the San Antonio schools. We've looked at Rough Rock School, where, although we have little as yet in the way of test results, we have a great deal of popular approval of the school's inclusion of native tongue and culture and its involvement with the community.

Of interest to us also have been the research findings of Modiano in Mexico[1], of Grieve and Taylor in Ghana[2], of Pedro Orata in the Philippines[3] and of Tore Osterberg in Sweden[4], all of which seem to support the superiority of at least initial mother-tongue instruction over the national language.

Interest in bilingual education, or at least in the use of the mother-tongue in the classroom is not new in the Bureau. Reversing what had been a long-established policy in the treatment of American natives, i.e., their assimilation into the mainstream culture at the cost of their culture, their language, and their separate identity, the Bureau, under the direction of Willard W. Beatty, set out in the late thirties to promote native-tongue literacy among Indian adults and young people. At that time, almost nine out of every ten Navajos were non-English speaking and the need to convey information to adult Navajos had become acute[5]. In addition there was a growing awareness of the failure of Indian children to adapt to an English-language curriculum at the beginning levels.

An alphabet limited to the keys found on a modern typewriter (thereby eliminating a number of symbols which had been used previously and greatly simplifying the diacritical markings) was developed by Oliver LaFarge, the novelist, and Dr. John P. Harrington, a linguist with the Smithsonian Institute. A pre-primer, primer, and reader in English and Navajo titled *Little Man's Family*, with text by J. B. Enochs, a former Bureau teacher, was followed by the *Little Herder* stories and the *Prairie Dog Fairy Tale* by Ann Nolan Clark, another Bureau teacher[6]. Preparation of the Navajo text was handled by Robert Young, Edward Kennard, Willetto Antonio, and Adolph Bitany. In the fall of 1940, Kennard, Young and Bitany began to introduce the reading and writing of Navajo into reservation schools. Illustrations for the texts were done by Gerald Nailor, a Navajo who had been trained at what is now the Institute of American Indian Arts in Santa Fe, a Bureau high school[7]. Materials prepared for adults included accounts of technical programs such as soil conservation, livestock management, water development, health, sanitation, and disease control. Native Navajo speakers were taught to read and write Navajo and were employed to work with doctors, scientists, teachers, and other technicians as interpreters[8].

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1. Nancy Modiano, "Bilingual Education for Children of Linguistic Minorities," **America Indigena,** XXVIII, 2, (April, 1968), 405-413.
2. D. W. Grieve and A. Taylor, "Media of Instruction: A Preliminary Study of Relative Merits of English and an African Vernacular as Teaching Media," **Gold Coast Education,** 1952, 1:36-52.
3. Pedro T. Orata, "The Iliolo Experiment in Education Through the Vernacular," **The Use of Vernacular Languages in Education.** Paris, UNESCO, 1953, pp. 123-131.
4. Tore Osterberg, **Bilingualism and the First School Language,** Vasterbottens Trycheri AB-Umea, 1961.
5. Willard Beatty, "Introducing Written Navajo," **Indian Education** #46. November 1, 1940, pp. 3-4.
6. **Ibid.**
7. **Ibid.**
8. Hildegard Thompson, "Use of Indigenous Languages in the Development of Indian Americans in the United States," a talk delivered at the Fifth Inter-American Indian Conference, Quito, Ecuador, October 17-25, 1965, p. 5.

A monthly newspaper printed in Navajo proved valuable in communicating to the Navajo information on activities of the Tribal Council, as well as national and world news[9].

A Navajo-English dictionary was also published at this time and proved valuable to native interpreters in their attempts to understand the technical vocabularies they were dealing with.

In addition to the Navajo materials for students, bilingual readers were written and printed, for the Hopi[10], and the Sioux[11]. In response to requests from Pueblo and Papago leaders, English-Spanish texts were also prepared[12]. Using these texts, it was assumed that reading and writing would be taught first in the child's mother-tongue, and attempted in English only after control of oral English had been achieved[13].

There is little to be found in the way of evaluation of this literacy program. In 1944, Robert Young, writing in *Indian Education,* a Bureau field letter, found the results of the use of native language in the classroom "highly encouraging." Teachers had lost their fears and misgivings, and people in remote reservation areas were welcoming written Navajo and requesting that it be used for all forms and regulations so that they would know what they were being asked to sign. Young felt there was good reason to believe that writing would spread among the Navajo. He expressed hopes that the Navajo themselves would ultimately become the authors and that the Navajo language would serve their needs until such time as they no longer had need for it[14]. Hildegard Thompson, a former Director of Education for the Bureau, feels that the status of many of the present-day Navajo Council members is due to their fluency and literacy in Navajo resulting from this program. She also points out that the bilingual readers served as a valuable link between home and school since children were encouraged to take their readers home and read to their illiterate parents. It is likely that this might well have been the beginning of a change in the feelings of Navajo parents toward the schools which had always seemed so alien[15].

World War II, with its drain on personnel and funds seems to have been at least partially responsible for the end of the native literacy program. Many of the linguists and native teachers who had been involved were assigned to the Army Special Services Branch to teach Indians. It is interesting to note that the Navajo language was used as an Army code—one which was never deciphered by the Japanese[16].

A second example of a Bureau project which made use of native language is the Five-Year Program which began in the mid-forties. It was not possible to accomodate in the immediate area all the Navajo children who desired schooling, and, as a consequence, a large part of a generation was growing up illiterate. Space was available in Bureau boarding schools in other areas which was made available to Navajo youths from twelve to sixteen years of age with little or no previous schooling. Since most of these students had no English, it was necessary to make extensive use of Navajo. In the first three years of this program, a teaching team consisting of an English-speaking teacher and a native-speaking instructional aide, gave instruction in Navajo and English. Ideas were first introduced in Navajo by the aides, and followed up by an English presentation. As students progressed, the amount of English increased. However, even after English became the chief medium of instruction, Navajo was still employed to determine how well students had understood the material presented to them in English.

The Five-Year Program expanded to an enrollment of over 5,000 pupils annually, spread over eight schools, and was highly successful in terms of finding employment for its graduates. It is felt that this success would not have been possible without the heavy reliance on the use of Navajo speakers and the Navajo language[17].

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9. **op. cit.** Thompson.
10. Edward A. Kennard, "The Bilingual Education Program" a paper presented at a conference on Styles of Learning Among American Indians at Stanford University, August 8-10, 1968.
11. Willard W. Beatty, "More Indian Service Publications," **Indian Education** #90, October 1, 1943.
12. **Ibid.**
13. **op. cit.** Kennard
14. Robert Young, "To Read and Write Native Languages," **Indian Education** #98, February 15, 1944, p. 8.
15. **op. cit.** Thompson.
16. **Ibid.**
17. **Ibid.** See also **Doorway Toward the Light** for a full account of this program. L. Madison Coombs, Haskell Institute, Lawrence, Kansas. BIA, 1962.

Although native-speaking aides have been responsible for some form of bilingual instructions in Bureau schools for many years, it has only been in the past few years that planned programs of instruction involving mother-tongue and English and extending beyond the beginning levels have resumed the trend initiated in the thirties and forties.

Several years ago a Title III-sponsored program at the Bureau Day School in Taos, New Mexico, where their failure in teaching reading had been attributed to a lack of oral mastery of English, attempted to teach reading in the native tongue first—Tiwa in this case. Tiwa was also used as the language of classroom instruction, with a period of oral English as a part of each day. A special orthography including the phonemes of both Tiwa and English was taught to beginning and first-grade pupils, who began reading with a familiar Tiwa story. The plan included introducing Roman orthography in the second and third grades with a continuation of the special script both for the introduction of new work and continued reading in Tiwa[18].

Other aspects of the program were the inclusion of Indian culture and the use of modern math curriculum with emphasis on manipulation and concrete experience to provide the basis for later verbal abstractions.

Because of staff difficulties and community conflict, the program was discontinued after its first year and no satisfactory evaluation was made.

After experimenting with various ways of using Navajo in the classroom—small group reading and talking in Navajo with older children, math and social studies help in Navajo for younger children—Wayne Holm, Rock Point's principal and Dr. Elizabeth Willink, the school's TESL specialist, submitted a proposal for a bilingual program to the Office of Education for Title VII funding.

As a result, beginning in the fall of 1971, Rock Point will initiate a program in bilingual education at all levels.

A contract with the Northern Arizona Supplementary Education Center (NASEC) in Flagstaff, Arizona, revived the development of native literacy materials begun in the thirties. NASEC has developed bilingual primary texts, filmstrips and tapes in Hopi and English. The stories used in the texts were recorded from native informants and transcribed in native tongue and English.

The interest generated by the Bureau's bilingual efforts of the past few years and, indeed, the national and international attention given to bilingual programs involving all groups who do not enter school with a command of the national language, make it likely that these programs will continue and expand.

On October 11, 12, 1968, the first of two project planning meetings for a bilingual kindergarten program for Navajo children was held at the Center for Applied Linguistics in Washington, D. C. The Center invited specialists in early childhood education, linguistics, psycholinguistics, anthropology, ESL and related fields. The first meeting was devoted to the educational, cultural and linguistic goals of such a program, to curriculum content, to problems related to the use of Navajo as a medium of instruction and to the use and teaching of English in kindergarten activities. The preparation of Navajo and non-Navajo teachers was discussed at the remaining sessions[19]. As a result of these meetings, a pilot bilingual program for Navajo children, involving six classes, was begun. This program has now expanded to include six first-grade classes, and projected plans include second-grade classes in 1973.

The Juneau Area of the BIA is entering the third year of a bilingual kindergarten program in conjunction with the University of Alaska. Six classes along the Kuskokwim River are using Yupiak as the medium of instruction. Materials in the language are being developed by the University.

On the basis of research conducted with other non-English-speaking groups, which leads us to believe that a child reads more easily in a second language if he has first made the association of the written symbols with the sounds of his first language, the area of reading research is high on the Bureau's list of priorities. A study of the problems of teaching English in Bureau schools done by the Center

18. Evelyn Bauer, Field Trip Report, May 3, 1968.
19. Ruth E. Wineberg, "Information Exchange," **English for American Indians,** Winter, 1969, BIA, pp. 30-31.

for Applied Linguistics in 1967, made the recommendation that: ". . . three pilot classes in reading the mother tongue be initiated in comparable schools, with children of the same age and approximate ability who know no English and whose native languages are different, and that these classes be matched with control classes whose introduction to reading is in English."[20] This project is entering its third year under the direction of Dr. Bernard Spolsky at the University of New Mexico.

The problems of providing bilingual programs for Indian students no longer seem insurmountable, although, certainly, time and adequate funding will be needed to lay the groundwork. Some materials exist for the Navajo, Hopi, Sioux, and Eskimo, but texts for other groups can be developed only after extensive descriptive language work and the development of a suitable orthography.

The training of native-speaking personnel to assume major responsibility for classrooms will also require time and funds but internship programs which make it possible for natives to further their education and an increasing interest on the part of native aides in becoming professionals are making inroads.

Decisions must eventually be made as to the type of bilingual program which is best for our students. Of interest is a comparative study made by the Southwestern Cooperative Educational Laboratory (SWCEL) in Albuquerque, examining the effectiveness of four different combinations of Navajo and English with Navajo children in grades one through three. In one approach, for example, all aspects of the program would begin in Navajo and gradually shift over to English during a two-year period. In another, the oral language program would be in English from the beginning and content instruction in Navajo with a gradual phasing into English over approximately a one-year period. In this approach, reading, which would be begun after six months of the first year, would be entirely in English[21].

One of the major problems at this point, is, I believe, one of determining objectives which in turn will effect our decisions on curriculum content and method. Whereas Dade County and San Antonio are educating students for participation in truly bilingual societies with a strong possibility of students receiving even post-high-school work in the mother-tongue, it is unlikely, at least in the near future, that even members of our largest group, the Navajo, will find themselves part of a truly bilingual Navajo-English culture in the Southwest. And, outside of the new Navajo Community College, located at Many Farms, Arizona, use of the Navajo language for higher education does not seem practicable.

If we were to define our goals for bilingual education with our Indian students at this point, which may well be a premature one, I think mother-tongue would be considered most useful as an effective bridge to eventual instruction in English as a means of avoiding both the progressive academic retardation so common in our Indian students and the damage to the child's self image induced by the rejection of his language and culture.

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20. Sirarpi Ohannessian, ed. **Study of the Problems of Teaching English to American Indians: Report and Recommendations.** Washington, D. C.: Center for Applied Linguistics, 1967.
21. "A Comparative Study of Four Approaches to Bilingual Education," a proposal submitted to the Office of Education by the Southwestern Cooperative Educational Laboratory, Inc., May 15, 1968.

THE BILINGUAL EDUCATION ACT AND THE AMERICAN INDIAN

Edward A. Tennant

The "Bilingual Education Act," known in brief as Title VII, is a section of the Elementary and Secondary Education Act (ESEA) of 1965. This title was amended in 1967 and passed as Public Law 90-247 on January 2, 1968.

"In recognition of the special educational needs of the large numbers of children of limited English-speaking ability in the United States," says the act in Sec. 702, "Congress hereby declares it to be the policy of the United States to provide financial assistance to local educational agencies to develop and carry out new and imaginative elementary and secondary school programs designed to meet these special educational needs."

For the purposes of Title VII, "children of limited English-speaking ability" means "children who come from environments where the dominant language is other than English."

Anyone who has read Leibowitz' *Educational Policy and Political Acceptance*: *The Imposition of English as the language of instruction in American schools*, will understand what a sweeping about-face of long-standing national policy this Bilingual Education Act really is.

Leibowitz' chapter on Indian education, which is included elsewhere in this bulletin, graphically depicts the harsh consistency of the "English-only" policy throughout the history of Indian education. The English language according to those who shaped and sustained this policy was the key that would unlock the riches of wisdom, education, and civilization for the American native. Unfortunately, this assumption proved false.

There is an ever-growing conviction among people concerned with Indian education at large that this failure to respect and build on the heritage of Indian culture - as underdeveloped as it may have seemed to trailblazers of other words - has been the single, heaviest burden on the back of Indian education since the first treaty dealing with Indian education was signed in 1794. If government and private studies of the Indian situation today point to a dismal state of affairs in general, they point to an inadequate and failing educational system in particular. The keystone of that system was the "English-only" policy.

This policy, as a few lone voices were constantly warning, could not provide, and demonstratedly has not provided, a viable educational system for the American Indian. One educator-linguist who grew up on the Navajo reservation testifies, "I have seen at a very personal level the devastating effects of an educational system which neglect to take into account the needs of students whose native tongue is not English. . . .my studies in linguistics, particularly in sociolinguistics, have made me aware that bilingual and bicultural education is imperative if Navajo children are to be at all successful in our schools."

Title VII, although it provides only seed money for bilingual programs on a developmental basis, has launched education in a new direction for thousands of children whose mother tongue is not English. The limited funds available for Title VII necessarily restrict the program to scattered and experimental projects. There is more than economic wisdom in this restriction. Educational programs which represent a complete reversal in national policy need time to find acceptance not only by teachers and administrators but by the very communities to which they are offered. Schools setting up bilingual programs under Title VII are far more than isolated laboratories chosen to test the advantages of a new educational hypothesis. They are show cases for everyone from the lawmakers who passed the Bilingual Education Act to the parents of children who are now taught in a language other than English. It is up to these schools to convince parents, teachers, school boards, statesmen, and the Office of Education that bilingual education really is better for the child, for the community, and for the country.

Bilingual education as defined by the Office of Education is the use of two languages, one of which is English, as mediums of instruction for the same pupil population in a well organized program which encompasses part or all of the curriculum and includes the study of the history and culture associated

with the mother tongue." The purpose of this bilingual instruction is to develop and maintain a child's self-esteem and legitimate pride in both cultures.

In order to achieve these goals, grants are made covering a wide variety of services and activities. Some of these are: the planning and development of bilingual programs; research projects; pilot projects; development and dissemination of special instructional materials; pre-service training for teachers, counselors, supervisors, and aides; in-service training for teachers and aides; acquisition of necessary teaching materials and equipment; provision of bilingual instruction; providing students with a knowledge of the history and culture associated with their dominant language; efforts to establish closer cooperation between the school and the home; early childhood education designed to improve the potential of children of limited English-speaking ability for profitable learning; related adult education, particularly for parents of participating children; bilingual education activities for dropouts or potential dropouts; and bilingual education activities in accredited trade, vocational, or technical schools.

American Indian and Eskimo Projects under Title VII

Although there were several developing bilingual projects for American Indians in both BIA and public schools before Title VII funds became available, they were largely the result of personal initiative and private funding and were limited mainly to four Navajo projects in Arizona and a small Cherokee program in Oklahoma.

In 1969, the Office of Education funded five Indian language programs: Cherokee in Gentry, Arkansas; Pomo in Ukiah, California (this program is more bicultural than bilingual); Navajo and Keresan in Grants, New Mexico; Cherokee in Tahlequah, Oklahoma; and Navajo in Blanding, Utah. These programs for four Indian languages were all in public schools since BIA schools and private, non-profit schools operated by Indian tribal organizations did not become eligible for Title VII funds until the spring of 1970 when amendments were made to the Bilingual Education Act.

In 1970, five new Indian programs were funded while four of the previous year's projects received continuation funding. The Cherokee program in Gentry, Arkansas was discontinued. The new programs included Yuk in Anchorage, Alaska; Navajo in Rough Rock, Arizona; Ute Mountain Ute and Navajo in Cortez, Colorado; Crow, Cree, and Northern Cheyenne in Hardin, Montana, and Chocktaw in Idabei, Oklahoma.

Of these five programs, all were in public schools except for Rough Rock, Arizona, a former BIA school now under contract as a private school to the Diné Biolta, a Navajo tribal organization, and one BIA school participating in the Northern Cheyenne component of the Hardin, Montana project.

All of these programs received continuation funding in 1971. The Navajo component, however, of the Grants, New Mexico, project is no longer funded by Title VII, so that the Keresan component can be developed more effectively. The Navajo project will continue but with other funding.

Six new Indian-language programs were approved for the 1971-72 school year. These include a Navajo project in the Sanostee-Toadlena schools of Window Rock, Arizona, and another Navajo project in Rock Point, Arizona. A project for Passamaquoddy was approved for Augusta, Maine. A third Navajo project was initiated in Ramah, New Mexico and a joint Zuni-Navajo project was approved for Gallup, New Mexico. In Pine Ridge, South Dakota, the Loneman School received funds for a Lakota (Sioux) project. Meanwhile the Cree component of the Hardin, Montana project became independent in 1971 and received separate funding.

Of the six new programs, three are in BIA schools: Sanostee-Toadlena and Rock Point in Arizona and Loneman School in South Dakota. The two New Mexico projects and the one in Maine are in public schools.

Summing up Indian participation in Title VII programs, there are at present sixteen projects with Indian or Eskimo language components. These projects include eleven Indian and one Eskimo language: Cherokee, Chocktaw, Cree, Crow, Lakota (Sioux), Pomo, Navajo, Northern Cheyenne, Passamaquoddy, Ute Mountain Ute, Yuk (Eskimo), and Zuni.

Since these projects are in a constant state of change and refinement from year to year and month to

month, rather than give a detailed report on each of them or even a brief abstract which would run the risk of being outdated by the time this report comes off the press, we will include here only a summary list of basic information on each project, including the name and address of each project director who can furnish further up-to-date information to those who desire it.

Current Indian Language Projects under Title VII

	Language	*1st Year Funding*	*Project Director and Address*
1.	Cherokee	1969	Mr. Herbert Bacon Northeastern State College Tahlequah, Oklahoma 74464
2.	Chocktaw	1970	Mr. Pierce J. Martin McCurtain County Superintendent of Schools, Courthouse Idabel, Oklahoma 74745
3.	Crow Northern Cheyenne Cree	1970	Mr. John Dracon Hardin Public Schools District 17-H 522 North Center Ave. Hardin, Montana 59034
4.	Cree (separate funding)	1971	Mr. Robert Murie Rocky Boy District #87 Rocky Boy Route Box Elder, Montana 59521
5.	Keresan Navajo	1969	Mr. Arturo Mendez Grants Municipal Schools P. O. Box 8 Grants, New Mexico 87020
6.	Lakota (Sioux)	1971	Miss Carla Fielder Loneman School Oglala, So. Dakota 57764
7.	Navajo	1969	Mr. Lynn Lee San Juan School District P. O. Box 218 Montecello, Utah 84535
8.	Navajo	1970	Dr. E. Roby Leighton Dine, Inc. Rough Rock Demonstration School Chinle, Arizona 86503
9.	Navajo	1971	Mrs. Marie L. deCarli Sanostee Boarding School Little Water, New Mexico 87420
10.	Navajo	1971	Dr. Elizabeth Willink Rock Point Boarding School Chinle, Arizona 86503
11.	Navajo	1971	Mr. Robert K. Chiago Ramah Navajo High School P. O. Box 248 Ramah, New Mexico 87321

	Language	*1st Year Funding*	*Project Director and Address*
12.	Passamaquoddy	1971	Mr. Meredith A. Ring Supervisor, Indian Education Box 291 Calais, Maine 04671
13.	Pomo (bicultural) Spanish	1969	Mr. José de la Peña Ukiah Unified School District School and Henry Streets Ukiah, Calif. 95482
14.	Ute Mountain Ute Navajo	1970	Mr. Robert Warner "Project Sun" P. O. Box 1420 Cortez, Colorado 81321
15.	Yuk	1970	Mr. Gary Holthaus State Operated Schools District I 650 International Airport Rd. Anchorage, Alaska 99502
16.	Zuni Navajo	1971	Miss Gloria Carnal Bilingual Project Director P. O. Box 1318 Gallup, New Mexico 87301

Submitting Title VII Proposals

Any local educational agency which fulfills the requirements for a Title VII project may submit a proposal to the Office of Education either alone or jointly with an institution of higher learning. The major requirement to qualify for a grant is having a target student population whose dominant language is not English and who come from low-income families. Other criteria and details on how a proposal should be drawn up can be found in the *Manual for Project Applicants and Grantees.* Since these guidelines are constantly being revised, it would be best to obtain the latest copy directly from the Office of Education by writing to: Director, Division of Plans and Supplementary Centers, U. S. Office of Education, 400 Maryland Ave. S.W., Washington, D. C. 20202.

Since the schools under the Bureau of Indian Affairs became eligible for grants only in mid-1970 and since these schools are directly under the Central Education Office of the Bureau in Washington rather than a State Education Agency (SEA), it was necessary for the Office of Education in the Department of Health, Education, and Welfare, to draw up a memorandum of agreement concerning the participation of BIA schools in Title VII programs. After a series of meetings, the final memorandum was drawn up on May 10, 1971. The agreement consists of ten main points that are of key importance to any BIA schools presently conducting a Title VII project or planning one for the future. Since this inter-departmental memorandum of agreement has not completed the final procedural steps as of this writing, it is possible that further additions or revisions may still be added. The main points of the working agreement are as follows:

1. The Bureau of Indian Affairs, Office of Education Programs (BIA/OEP), Department of the Interior, will perform the functions of a State Education Agency (SEA) for the purposes of the participation of BIA schools or consortia of schools in the Title VII program.

2. The Office of Education (OE) will inform BIA/OEP of the submission dates for preliminary proposals and provide copies of the *Manual for Project Applicants and Grantees*, the calendar of events for the Title VII program and subsequent revisions. BIA/OEP will notify those BIA schools which it believes have the interest and capability to develop preliminary proposals.

3. Ten copies of the preliminary proposals will be submitted to OE. Five copies will be submitted to BIA/OEP. If preliminary proposals are received by OE which have not also been sent to BIA/OEP, OE will make copies available to BIA/OEP.

4. All proposals submitted by BIA schools will be reviewed by BIA/OEP and a priority ranking, together with any other pertinent information, will be sent to OE by the deadline established in the calendar of events for the receipt of recommendation from the State Education Agencies.

5. At the same time, proposals from BIA schools will be reviewed by OE staff and outside readers and tentative selections for further development made.

6. These selections will be discussed with BIA/OEP and differences, if any, between OE and BIA priorities will be resolved prior to the announcement to Congress and to applicant schools.

7. OE will hold developmental conferences for selected applicants in which representatives of the local BIA schools and BIA/OEP will participate. OE Title VII staff and BIA/OEP staff will cooperate in providing technical assistance in the development of formal implementation plans.

8. OE will communicate with local project staff and will monitor projects in BIA schools on the same basis as it does with all other Title VII projects. BIA/OEP staff will normally accompany OE staff on site visits. OE will consult with BIA/OEP concerning program and budget decisions and will provide copies of correspondence to BIA/OEP.

9. BIA/OEP will provide OE with copies of all reports and other information resulting from site visits to Title VII projects in BIA schools or received from BIA schools in Title VII projects.

10. Funds for approved projects in BIA schools in accordance with agreed-upon budgets and implementation plans will be transferred to the Department of the Interior on a project-by-project basis. These funds will be paid out periodically to the grantees upon their request.

The above memorandum of agreement also states that all regulations regarding the Bilingual Education Program and the procedures outlined in the *Manual for Project Applicants and Grantees* are expressly incorporated by reference in the memorandum unless exceptions have been made by agreement between the Office of Education and the Bureau of Indian Affairs.

Any BIA school or group of schools can obtain further information regarding bilingual programs or technical assistance in developing such programs by contacting Mr. Robert Rebert, Chief, Language Arts Branch, Division of Educational Planning and Development, P. O. Box 1788, 123 4th St., S. W., Albuquerque, New Mexico 87103.

WHAT CLASSROOM TEACHERS SHOULD KNOW ABOUT BILINGUAL EDUCATION

Miles V. Zintz*

PART I

Cross-Cultural Education in the Southwest

The child whose cultural heritage is different from the school culture is in need of special educational services that will bridge the cultural barriers and meet his language needs before he can take advantage of the course of study with which he is apt to be confronted.

Each child coming to the school is expected to become oriented to certain values emphasized in the dominant culture. Some of these values are: (Zintz)

1. He must climb the ladder of success, and in order to do this he must place a high value on competitive achievement.

2. He must learn time orientation that will be precise to the hour and minute, and he must also learn to place a high value on looking to the future.

3. He must accept the teachers' reiteration that there is a scientific explanation for all natural phenomena.

4. He must become accustomed to change and must anticipate change. (The dominant culture teaches the "change," in and of itself, is good and desirable!)

5. He must trade his shy, quiet, reserved and anonymous behavior for socially approved aggressive, competitive behavior.

6. He must somehow be brought to understand that he can, with some independence, shape his own destiny, as opposed to the tradition of remaining an anonymous member of his society.

Too many teachers are inadequately prepared to understand or to accept these dissimilar cultural values. Teachers come from homes where the drive for success and achievement has been internalized early, where "work for work's sake" is rewarded, and where time and energy are spent building for the future. The Indian child, for example, comes to the classroom with a set of values and a background of experience radically different from that of the usual school child. To teach the Indian child successfully, the teacher must be cognizant of these differences and must above all else seek to understand, without disparagement, those ideas, values, and practices different from his own.

Robert Roessel, former Director of the Experiment Education Program at Rough Rock, Arizona, for Navajo children, attempts to give his staff an awareness of the peculiar texture of *Navajo* life. He hopes to avert just such episodes as the small-scale tragedy reported below that resulted from a teacher's inexperience at a reservation school. The teacher was from the East. (Conklin)

> Her credentials were excellent, but she had never taught Navajo children before. She noticed one morning that the face and arms of one of the third grade boys was covered by something that looked like soot. In his hair was a substance that resembled grease. With a normal respect for cleanliness, the teacher asked the boy to wash himself. When he refused, she took him to the washroom and washed him.

*Miles V. Zintz is Professor of Education at the University of New Mexico. With his kind permission we are reproducing here from his five-chapter study (March, 1969), the three chapters most pertinent to Indian bilingual education plus several of his select bibliographies.

> The boy never returned to school. It turned out that his family had conducted an important healing ceremony on his sick sister, the "soot" and "grease" being a part of the ceremonial painting. With her soap and water, the teacher destroyed the healing powers of the ceremony. The girl died and the parents could not be shaken in their belief that it was the teacher's fault. No member of the family has set foot in a school since.

Kelley, in the ASCD Yearbook, *Perceiving, Behaving, Becoming*, describes the behavior of the fully-functioning self in present day society:

> We live in a moving, changing, becoming-but-never-arriving world. . .
>
> (The child) needs to see process, the building and becoming nature of himself. Today has no meaning in the absence of yesterdays and tomorrows.
>
> The growing self must feel that it is involved, that it is really a part of what is going on, that in some degree it is helping shape its own destiny.
>
> The acceptance of change as a universal phenomenon brings about modifications of personality. . . one who accepts change and expects it, behaves differently . . .
>
> He sees the evil of the static personality because it seeks to stop the process of creation . . . Life to him means discovery and adventure, flourishing because it is in tune with the universe.

But the Indian child has likely already learned that nature provides. Man's objective is to remain in harmony with nature. The dances, the rituals, the seasonal prayers, and the chants are learned perfectly and passed from one generation to another—hoping to maintain and restore harmony.

Indians believe that time is always with us. Life is concerned with the here and now. Accepting nature in its seasons, they will get through the years one at a time.

So, too, the Indian child is early made to feel that he is involved and personally responsible for doing his part so that all of life—in the village—in the natural order—all the cosmic forces—will be kept running smoothly and harmoniously. *But*, not with the goal of changing his destiny determined for him by the older and wiser ones. He best fulfills his destiny by remaining an anonymous member of his social group. He accepts group sanctions, placing primary emphasis on conformity.

The child will be able to understand the values of his teacher much better if the teacher has some understanding and acceptance of his.

Cultural Differences and English Language Learning

In the publication *Educating the Children of the Poor*, (Frazier) it is pointed out in "the task ahead" that adequate theory requires an integration of, or welding together of, the wisdom of sociologists and psychologists so that environmental factors and personality variables will each get proper attention. Applied anthropology is also a very important portion of the total appraisal of the child. His cultural heritage includes all the values, ideals, aspirations, anxieties, taboos, and mores that structure his fundamental habits of behaving.

Some excerpts from the literature will make clear the anthropological contribution to understanding behavior.

Salisbury related a rather sobering story of the Alaska Indian child's problem with the middle-class Anglo-oriented course of study:

> By the time the native child reaches the age of seven, his cultural and language patterns have been set and his parents are required by law to send him to school. Until this time he is likely to speak only his own local dialect of Indian, Aleut, or Eskimo, or if his parents have had some formal school he may speak a kind of halting English.

He now enters a completely foreign setting - the western classroom situation. His teacher is likely to be a Caucasian who knows little or nothing about his cultural background. He is taught to read the Dick and Jane series. Many things confuse him: Dick and Jane are two *gussuk* (Eskimo term for white person. From Russian word, *cossack.*) children who play together. Yet he knows that boys and girls do not play together and do not share toys. They have a dog named Spot who comes indoors and does not work. They have a father who leaves for some mysterious place called 'office' each day and never brings any food home with him. He drives a machine called an automobile on a hard covered road called a street which has a policeman on each corner. These policemen always smile, wear funny clothing and spend their time helping children to cross the street. Why do these children need this help? Dick and Jane's mother spends a lot of time in the kitchen cooking a strange food called 'cookies' on a stove which has no flame in it.

But the only bewildering part is yet to come. One day they drive out to the country which is a place where Dick and Jane's grandparents are kept. They do not live with the family and they are so glad to see Dick and Jane that one is certain that they have been ostracized from the rest of the family for some terrible reason. The old people live on something called a 'farm,' which is a place where many strange animals are kept - a peculiar beast called a 'cow,' some odd looking birds called 'chickens' and a 'horse' which looks like a deformed moose. And so on. For the next twelve years the process goes on. The native child continues to learn this new language which is of no earthly use to him at home and which seems completely unrelated to the world of sky, birds, snow, ice, and tundra which he sees around him.

Evvard and Mitchell have analyzed the concepts in the stories in the Scott-Foresman Basic Readers and found many conflicts with the young Navajo child's concept of himself, his family, and his community. They have contrasted beliefs and values encountered in the Scott-Foresman Basic Readers for the primary grades with the beliefs and values of the traditional Navajo child:

Middle-class, Urban Values:	*Navajo Values*:
Pets have human-like personalities	Pets are distinct from human personality
Life is pictured as child-centered	Life is adult-centered
Adults participate in children's activities	Children participate in adult activities
Germ-theory is implicitly expressed	Good health results from harmony with nature
Children and parents are masters of their environment	Children accept their environment and live with it.
Children are energetic, outgoing, obviously happy	Children are passive and unexpressive
Many toys and much clothing is an accepted value	Children can only hope for much clothing and toys
Life is easy, safe, and bland	Life is hard and dangerous

The student internalizes much of his way of behaving by the demands placed upon him by his culture. The culture instills group goals, mores, taboos, values, and levels of aspiration. The attitude of the teacher, of course, is vital in these circumstances. Unless the teacher is patient and understanding, the student who must learn English as a second language develops insecurity instead of security, worry instead of competence and makes enemies instead of friends for the English language.

Cultural mores, habits, values and characteristics interfere with the learning of a second language.

This interference is aggravated by the lack of knowledge which educators have about others' cultures. Culture represents communication, and without culture there can be no communication. Personality affects communication. Home environment contributes to the success or failure of acculturation and language acquisition. Most of all, the desire and need to accept the new language and its cultural ramifications determine the success of the language learner's endeavors.

The basic problems in the Southwest are *biculturalism*, not bilingualism. Language expresses the values of a culture; culture, by determining behavioral practices and goals, limits the connotations and denotations of the language. The scope of bilingualism is illustrated in the use of the word *father* in Anglo-America and in Zuni Indian culture. For the Zuni child, the word *father* represents his mother's husband - a man who enjoys his children as companions. He takes no part in disciplining his children, nor does he have any concern for their economic security. In his matrilineal society, the mother owns the property and her brothers assist in the rearing of and disciplining of the children. Further, it is said that she may divorce her husband by leaving his shoes and ceremonial garb outside the door while he is away and that this act will be his cue to gather up his few belongings and return to his mother's house. Family organization is of an extended nature, and the marriage does not decree that a man-wife love relationship is more important than the consanguinal and mother-son or sister-brother relationship. In short, in a matrilineal, consanguinal, extended family, *father* may mean a specific set of behavior patterns such as described above.

Father, for the Anglo middle-class child, represents the legal head of a household who is held responsible for the rearing and disciplining of his children. His marriage to his wife is based, at least theoretically, on a conjugal, or love relationship; and even if dissolved in a court of law, he may still be held accountable for her full support. For this child, *father* is a full set of meanings derived from a patrilineal, conjugal, nuclear family relationship. (Zintz, "Cultural Aspects of Bilingualism")

The interdependence of language and culture for the young child has been well stated by Davies:

> To change a child's medium of instruction is surely to change his culture; is not culture bound up with language? And if the language should disappear, can the culture remain? Everyone must have his own orientation to life, and language provides the most natural means of reacting to life. In the deepest things of the heart, a man or woman turns naturally to the mother tongue; and in a child's formative stages, his confidence in that tongue must never be impaired.

It is hoped that the child holds two psychological values about his language and his family that speaks that language. First, he should feel that his language is a good one; that it expresses his ideas and wishes adequately; and that he may be justly proud to use it. Second, all of the people in his extended family use the language which he has learned as his first language and he derives his ego strength and sense of personal worth as a member of that particular ethnic group. If the school teaches, however, that English is the only acceptable language there and that use of another language even during free play on the playground will be punished, the child can only conclude that his school feels that his language is inferior to the one that must be used all the *time* during the school day.

If the teacher reacts negatively to the child's first language, the child will further conclude that only people that speak English are adequate in his teacher's eye. In the Southwest for many years, both of these things were done to children. They were denied the use of their own language and subtly taught that their language and their people were inferior. To cite one very bad example of this kind of teaching, a dormitory counselor in a bordertown dormitory for Indian students is reported to have met a bus load of boys and girls at his school in the fall of the year, and asked them to group themselves around him so that he might say a word to them. He then made the following announcement: "The first thing I want you to do here is to forget that you are an Indian, and the second thing I want to tell you is that we speak only English around here."

For Spanish-speaking children, bilingual schools taught in Spanish and English would be natural, workable solutions in many schools in the Southwest. Since Spanish is a major language of the world, books, newspapers, and periodicals are readily available in that language. Many nations in the Americas have some 200,000,000 speakers of the language with libraries, government, business, and schools functioning in Spanish.

The question of young Navajo children receiving instruction in school in the Navajo language is an entirely different question - though no less important. Although there are no libraries and there is

no indicated future use, the two psychological values already discussed are just as valid for the Navajo as for the Spanish child.

Maybe, even for him, at age five and at age six, the school should spend up to two-thirds of his day in the Navajo language with planned, sequenced, intensive teaching of English as a spoken means of communication. Learning concepts and reading readiness in Navajo would save the child some time later on. Hopefully, by age seven or eight, he would begin to learn to read in English and use it as his medium of reading and writing instruction. Yet, by the behavior of the adults at school during his first three years there, he would know that the school valued his language, and in turn his cultural heritage, and he might well participate in a Navajo conversation class throughout his school life.

The following paragraph has *too* accurately and for *too* long expressed the viewpoint of *too* many Anglo-American teachers toward the Mexican-American students and their parents:

> They are good people. Their only handicap is the bag full of superstitions and silly notions they inherited from Mexico. When they get rid of these superstitions, they will be good Americans. The schools help more than anything else. In time, the Latins will think and act like Americans. A lot depends on whether or not we can get them to switch from Spanish to English. When they speak Spanish they think Mexican. When the day comes that they speak English at home like the rest of us, they will be part of the American way of life. I just don't understand why they are so insistent about using Spanish. They should realize that it's not the American tongue. (Madsen)

Summary

Teachers must be continually alert to the differences in languages, values, customs, the whole cultural heritage, and seek to understand the students they teach as real people with all the feelings, attitudes, and emotional responses that make them behave the way they do. Most important is the realization that one way of life or one language for communication is not better, nor superior, and not "more right" than another.

PART II

Problems on Second-Language Learning

Linguistics is the scientific study of languages. It encompasses the sounds of language (forty-four phonemes in English) which is called phonology; the meanings in words which is called semantics and the order of words in sentences which is called syntax, or structure, or the grammar of the language.

The linguistics of English language can be discussed meaningfully *only* in the context of the cultural values, practices, attitudes and ideals which are expressed through language. Chapter I contained such a discussion.

Linguistic Principles and Teaching English Sentence Structure

There are several linguistic principles that impinge directly on the work of the classroom teacher. Many teachers are undoubtedly aware of these; others may need to study them carefully and reflect upon their meanings.

1. Language is oral. It is *speech* before it is *reading* or *writing*. Spoken language is the "natural" expression commonly used by the native speaker with its contractions, idiomatic and slang expressions, and one word answers. "How are you?" is sure to be spoken "Howarya." "Itza book" will be the oral expression for "It is a book."

2. Language is habit. It is learned behavior. Native speakers are not conscious of each sound or word they say nor of the sequence of the sounds of words. They are primarily conscious of the ideas or thoughts they are trying to convey. The stringing together of sounds in certain positions is an unconscious act. The language habit is automatic for children by the time they start to first grade. Because language is learned behavior, it is learned through the repetition of producing it. When children learn the first language in a free, relaxed, trial-and-error atmosphere, there is time for error, correction, and repetition without conscious effort. When any language is super-imposed as a second language, there is much interference between the two sound patterns and much guided repetition, correction, and drill are indicated.

3. Language is arbitrary. It has a specific, prescribed structure. Young children learning English in a classroom were heard composing sentences about "things" visibly around them. One child said, "This is a book." Another said, "This is leaves." Another said, "This is children." The teacher accepted the contributions and went on to something else. She should, of course, accept the contribution of each child and encourage him. But, he must either learn the first time to say, "These are leaves" and "These are children" or he will need later to try to unlearn something that he thought "his teacher taught him."

4. Language is personal. Language reflects the individual's self-image and is his only avenue to expressing all that he is, all that he has as a heritage, and all that he aspires to be. Just how personal is perhaps well illustrated in the way in which the Paraguayan people have for centuries now had Spanish as the official language of business and government, but have to this day retained Guarani, a pre-literate Indian dialect, as the language of the home and family in which they express their most personal thoughts. It is said that Paraguay is our most bilingual country.

5. The language of a given group of people is neither "good" nor "bad"; it is communication. Reference to dialects of English other than "standard" English are best referred to as non-standard" rather than "sub-standard."

6. Language is more than words. This is evidenced by the fact that the spoken language can reveal more meanings than the written language. The suprasegmentals of pitch, stress, and juncture as well as facial expression, gesture, and bodily movement add a great deal to meaning and interpretation of language.

7. Language is culturally transmitted. (See use of "father" in two cultures, p. 42)

Learning English as a Second Language vs. Learning It as a First

Teaching English as a second language is not at all like teaching English to English speakers although teacher preparation in most colleges for teachers ignore this very important fact. Most teachers find themselves totally unprepared when they go to teach in areas where large percentages of children enrolled in school are learners of English as a new language. On the other hand, the fact remains that no one can "help himself" in our English-speaking society *anywhere* until he can speak the language of his peers fluently and spontaneously. The audio-lingual approach to second language learning can prepare boys and girls for much more profitable formal school experiences.

The learning of English by the native speaker may be contrasted with learning English as a second language in several ways:

When learning English as a native language:	*When learning English as a second language*:
1. *Time* is not a factor, the *child* has six preschool years to master the sound system of the language of his mother.	1. *Time* is a crucial factor. One may have eight weeks in the summer; an intensive course; or one must continue an academic course of study in English while learning English.
2. Infants are usually richly rewarded for each *imitative effort*. Trial-and-error works very well with much time in a friendly, supportive, informal atmosphere.	2. The student must "Listen, repeat, and memorize."
3. Parents and friends are very patient and expect to *repeat*, *reward*, and *reinforce*.	3. The student is "expected" to speak the language of the school. He must have a course of study that is organized, sequential, and efficient. Those who have the patterns internalized are often impatient with older students. *Teachers must* repeat, reward, and reinforce.
4. The child grows up in an environment where he enjoys a maximum opportunity to repeat and to remember everything he hears.	4. The classroom situation is conducive to much forgetting. What one learns during one hour, he has all day, all week-end, all vacation periods to forget. One tends to forget almost all of what he studies in a "formal" manner.
5. What the child doesn't remember today, or whatever mistakes he keeps making today, he can unlearn or relearn in the weeks or months in the future.	5. Drills cannot be avoided. Students must have many repetitions, and carefully spaced reviews on all patterns they need to learn to use automatically.

Components of Language

Grammarians and linguists have given us words to use to describe the language. *Phonology* is the study of sounds of the language; *morphology* is the study of the structure of words; *syntax* is the grammar of the language, word order, kernel sentences, and modifiers which give variety to the sentences we use; and *semantics* is the study of meanings communicated through languages. The chart on the following page will help the reader to visualize elements of each of these four ways to describe the language.

The aural-oral method of learning a language is a method of instruction that places emphasis, especially in the beginning, on *hearing and speaking* the new language rather than on learning grammatical structure, translation, reading or writing. The emphasis is entirely upon hearing and speaking the language first. When this method is correctly followed, the learner says only what he has heard

(with understanding), reads what he has said, and writes what he has heard, said, and read.

1. While Spanish uses only five vowel sounds, English uses many more to distinguish meanings. Practice must be given to develop auditory discrimination of these pairs of vowels. Heat - hit; met - mate; tap - tape; look - luck; pin - pine; hat - hot; sheep - ship; mit - meet; eat - it; late - let; bed - bad; fool - full; coat - caught; caught - cut.

2. Consonant sounds can cause trouble, too. Pig - big; pig - pick; thank - sank; then - den; place - plays. Also, clusters like "ts" in *hats*; "lpt" in *helped*; "lkt" in *talked*.

3. *Minimal pairs.* The phoneme is the minimum element of expression in a spoken language by which one thing that may be said is distinguished from any other thing which might have been said. Thus, *bill* and *pill* differ only in one phoneme. They are, then, *a minimal pair. Minimal pairs* are two words that have only one phoneme sound that is not the same. Auditory discrimination practice is important in second language teaching to help learners clearly distinguish new phonemes.

Pick-pig	sheep-ship	map-mat
big-pig	force-fours	death-deaf
niece-knees	lacy-lazy	bus-buzz
price-prize	witch-which	bit-beat
age-edge	taste-test	boat-both
pain-pen	dip-deep	tuck-tug

A picture may be more useful than a written word for beginning students.

Phonologically, children must learn to hear all the phonemes that are used in English that were not used in their native language. For Spanish-speakers learning English, there are several substitutions likely to be made such as "thumb" or "sumb"; "path" as "pass." Variant vowel sounds need to be heard clearly as do the several consonant sounds often substituted. This requires the ability to discriminate minimal pairs with practice. Minimal pairs are two words that are sounded except for one sound that changes the meaning. Ending consonant sounds are often troublesome. For example, "pick" is spoken as "pig"; "map" is spoken as "mat."

4. Modifiers do *not* follow the noun in English:

The blue sky, not *the sky blue.*

The juicy apples, not *the apples juicy.*

Also,

The bus station is not the same as *the station bus.*

The pocket watch is not the same as *the watch pocket.*

5. Intonation and stress are very important in conveying meanings:

Which book *did* you buy? Are *you* going back to school this fall?
Which book did *you* buy? Ar. you going back to school *this* fall?
Which book did you *buy*? Are you going *back to school* this fall?

Read each sentence emphasizing the underlined word.

6. Juncture: (Inflection determines meaning.)

Mary was home sick.
Mary was homesick.

Was that the green house?
Was that the Green house?
Was that the greenhouse?

I saw a blue bird.
I saw a bluebird.

Bob said he saw a horse fly.
Bob said he saw a horsefly.

Mary was sick at home.
Mary wanted very much to go home.

Was it a green color?
Do the Greens live there?
A place where plants are nurtured the year around.

The bird I saw was a blue color.
It was a bluebird.

The horse had wings.
A fly that bothers horses.

And in these:

I scream	Send them aid	Night rate	lighthouse keeping
Ice cream	Send the maid	Nitrate	light housekeeping

7. Structure Words:

Words that have no referent are called "empty" words or "structure" words. It is estimated that there are no more than 300 such words in English but they comprise nearly half of all of the *running words* in elementary context. This underscores the need for mastering them as service words as early in the reading process as possible. They are termed "markers" for the type of structural element they precede:

Noun markers:	a, the, some, any, three, this, my, few . . .
Verb markers:	am, are, is, was, have, has, had . . .
Phrase markers:	up, down, in, out, above, below . . .
Clause markers:	if, until, because, that, how, when . . .
Question markers:	who, why, how, when, what, where . . .

These little words have been called, in addition to "empty" or "structure" words, "signal" words, "glue" words or "service" words. In and of themselves, they do not convey meaning and they do not fit any linguistic pattern for teaching. They must be taught early because they are the necessary connectors. They play a significant part in helping the reader to anticipate meanings which verbs or nouns following will carry in a given sentence structure. (Newsome)

8. Gesture: The Unspoken Language.

With a quick twist of the wrist, a Lebanese taxi driver can convey utter contempt for a traffic policeman. A South American may show admiration for a beautiful woman by opening one eye wide with thumb and forefinger. An American Indian warrior could indicate sadness by making the sign for heart, then drawing his hand down and toward the ground. He signified "friend" by putting his two forefingers together, symbolizing brothers in each other's company ("Gesture — The Unspoken Language").

PART III

The Bilingual School

The term "bilingual" implies proficiency in two languages and the ability to participate in two cultures. Thus, the primary objectives of a bilingual program are language acquisition and cultural pluralism. Learning a second language is one method of increasing understanding across cultures. The contrasts between the Apache, Pueblo, or Navajo Indian, Spanish-American, or Mexican cultures and the dominant Anglo culture are clearly observable. Cultural diversity has contributed to the difficulty in formulating concise and unambiguous goals and objectives for a bilingual program.

In present day America, understanding the dominant culture is necessary. However, this understanding need not be viewed as the destruction of a minority culture, but rather as the harmonious controlled interaction between two cultures.

Children of minority ethnic groups, as a total population, have the same mental abilities as other children. Socio-economic status has proved to be an important variable in acculturation.

The major objectives of the bilingual program are:

1. The learner will become more proficient in his own oral and written language as well as in the second language.

2. The learner's achievement and aspiration levels will be raised through the program.

3. The learner will be recognized as one who represents "a culture within a culture."

4. The learner will be more capable of accepting democratic principles as a social process.

5. The school environment will become more adept at encouraging the bilingual to demonstrate the values of both the new and the old cultures.

6. The school will provide programs for children of different cultures.

7. The learner will become more proficient in oral language development in both languages.

8. A plan for optimum individual development will be provided through various types of teaching techniques.

9. The school environment will provide an atmosphere of understanding which encourages the learner to develop all facets of his personality.

10. The guidance program will aid the bilingual in seeking and preparing for success in both cultures.

11. The learner's self concept will be constantly considered by the school.

12. The society which the learner accepts as a second culture will recognize the value of bilingualism.

Principles Which Relate to Bilingual Schools

1. Instruction in the first years of school should begin in the mother tongue. This has been the practice in most countries around the world. (*Monographs About Basic Education*)

> . . . There is general agreement all over the educational world that the child should begin his education in his mother tongue or. . .the language he most easily understands. (Haarhoff)

Language is a physical, social, and cultural phenomenon that reflects intimately the psychology, the social situation, and the culture of the individual that uses it. Around the world, there are many groups that need to acquire a second language that has national or international importance if their people are to be able to communicate broadly relative to economics, education, and welfare of the citizenry. At the same time, the beginnings of education can well employ the mother tongue and the curriculum of the school be designed to introduce the second language at an appropriate time in the child's education. Choosing the language for school beginners is most significant because of the interdependence of language and culture. They are inseparable. The child's initial involvement which he feels at school must grow out of the acceptance of his language and culture in the school situation. To these, he can relate.

2. Bilingualism need not adversely affect school achievement. It is that the achievement test results for the past four decades in the Southwest have demonstrated that boys and girls from non-English speaking homes fall further and further behind in achievement as they progress through the school. (Zintz, *Education Across Cultures*) However, Arsenian reported, after a broad survey of many studies, that bilingualism neither accelerates nor retards mental development. Natalie Darcy confirmed these findings. If the problem is not one of limited intelligence, then it becomes the responsibility of the school to find the causal factors and iliminate them.

Several studies listed in Part IV evaluate the problems of language learning for bilingual students and offer support for the establishment of truly bilingual schools.

3. The emotional feelings about one's language are very important. Language is personal. A fitting example has already been cited of the way in which people use one language as the language of government and economics and another language for the most personal exchange of ideas in the bilingual situation in Paraguay. While Spanish is the official language, almost all Paraguayans also speak Guarani.

4. To preserve a language, it needs to be used as a medium of instruction in the schools. Without instruction in literacy skills, each succeeding generation has less and less use for the original language of the group. If the minor language is widely used in another geographical area, there will be literature available, libraries, and the language will be used as the language of government and economy. This is true of the Spanish language spoken by many Southwesterners. South of the Rio Grande, there are some 200,000,000 Spanish speakers. Spanish is one of the twelve most used languages in the world.

5. While the members of a minor language group must learn the major language in order to function in the basic institutions of that society, (government, economy, education, welfare), the reverse of this is not true. The members of the majority language group do not have the same economic and social need to learn the minor language.

6. Native languages of minority groups are apt to be lost if: they serve no purpose in economics and commerce; radio and TV programs are not presented in that language; they are not used in the schools; there is no printed literature of importance in that language; and if progress in school places no reward on knowing that language.

What is a Bilingual School?

Few programs operate in public schools in the United States as bilingual, that is, putting two languages to work in the conduct of the school.

A bilingual school is one in which instruction during the school day is afforded in more than one language. This means that content subjects will be taught in both languages. One might study his mathematics in English and his history lesson in Spanish in a Spanish-English bilingual school. This is to be contrasted with studying Spanish for one period of the day as a foreign language with little attention given to that language except in the class period.

The only test results of educational achievement of the bilingual school in operation have been reported by Malherbe concerning Dutch-English bilingualism in South Africa. In statistics released in 1946, he reported that students in the secondary school divided themselves into three groups: those

who were educated in English-speaking schools; those who were educated in Afrikaans-speaking schools; and a relatively small number educated in Afrikaans-English bilingual schools.

Malherbe tested about 18,000 students in three types of South African schools: Unilingual Afrikaans, Unilingual English, and Bilingual Schools.

Some of his conclusions are:

> The main point . . . is that the figures show a clear advantage in favor of the bilingual school in regard to language attainment in both English and Afrikaans at all intelligence levels . . . the gains, though seemingly small, are all statistically significant.
>
> . . . those children with a bilingual home background who attend the bilingual medium school top the list, while right at the bottom of the list come the children with a unilingual home environment who attend a unilingual medium school.
>
> In geography the pupils in the bilingual school were, on an average, about *four-fifths* of a school year ahead of those in the unilingual school. In arithmetic they were *half a year* ahead.
>
> Adverse sectional discrimination is from three to four times as great in unilingual as in the bilingual schools. The children with bilingual home environment display the least adverse discriminating . . . The consistency of our data on the main issue leaves no doubt about the fact that in bilingual medium schools, where pupils of both sections mix and associate freely, the children display a comparatively low degree of intercultural antagonism. (Malherbe)

Davies writes about second language learning and describes one situation in Wales.

> "The supplementing of second language teaching by the study of another subject through its medium, is the only way in which the second language will ever come to life in unilingual environments, in South Africa or anywhere else . . . The mastery of a language must become subconscious, and this can never be achieved merely by studying that language in the language lesson only . . . World Geography is a possibility."
>
> A pleasing feature of parallel-medium or "two-stream" schools in Wales is their complete lack of separatism. The Primary School, Aberystwyth, reorganized in 1948, has 340 pupils, of whom 225 are English and 115 Welsh-speaking. The staff is bilingual, and the spirit of the school on the whole is Welsh, with Welsh the language of the staff and staff meetings. English is used as the medium of instruction for the English-speaking section throughout, with Welsh introduced as a subject in the second year and taught in every subsequent year. For the Welsh-speaking section, English is introduced during the second half of the first year, the time devoted to it being increased during the second and subsequent years; by the third year, the medium of instruction has become 50% Welsh, 50% English, and by the fourth, equal facility in the use of both languages is aimed at. (Davies)

Peal and Lambert demonstrated that bilingual children are superior on both verbal and non-verbal intelligence tests when compared with monolinguals. They compared monolingual and bilingual groups of ten-year-old children who were students in six French schools in Montreal, Canada. Their groups were matched on age, sex, and socio-economic status. They concluded that their bilingual subjects had greater mental flexibility than did the monolingual children and in addition demonstrated a superiority in concept formation.

Rojas reported at the end of the 1964-65 school year about a bilingual school in Miami:

> The bilingual school has two groups of Spanish-speaking pupils and two of English-speaking pupils in grades one through four with eight native Spanish-speaking

> teachers and eight native English-speaking teachers. English is the medium of instruction for all pupils for approximately half of each day; and Spanish, the medium of instruction for all pupils during the other half. Next year the fifth grade will be added and the following year the sixth. The expectation is that at the end of the sixth grade both groups of pupils will know the two languages well enough to operate effectively in both.

Modiano did a comparative study of two approaches to the teaching of reading in the national language. Modiano studied reading achievement to native Indians in the Chiapas highlands in southern Mexico where some of the Indian children are taught to read first in their native Indian languages while others are immediately taught in Spanish. In each of three tribal areas studied, the researcher found significantly better reading ability among children who were first taught to read in their original language.

Modiano's findings are applicable to all schools, and to test this hypothesis she urges experimental programs to begin in regions in the United States having large linguistic minorities. No school system in the nation now [1968-1969] employs the native language first approach.

PART IV

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B. *An Annotated Bibliography of Cross-Cultural Studies*

Andersson, Theodore. "Foreign Language and Intercultural Understanding." *National Elementary Principal.* 36:32. February 1967.

The bilingual needs to be proud of his heritage. The techniques studies in several school systems revealed that there are signs of better communication and improved attitudes toward non-English cultures. The bilingual children studied in these school programs seemed to become more literate in both the Spanish and English languages.

Benham, William J. "Liaison: Key Word to School Program Completion." *Journal of American Indian Education.* 5:26-30; No. 2. January 1966.

Benham studied the extent to which public schools that serve Indian students are involving community and parents in relationship practices. The results indicated that better liaison practices are needed.

Bernardoni, Louis C. "Apache Parents and Vocational Choice." *Journal of American Indian Education.* 2:1-9; No. 2. January 1963.

The historical, cultural, and environmental factors which affected the stated vocational preferences of male White Mountain Apache students was studied here. Less than half of the sample consisted of boys having both parents assuming the parental role. Those parents who hoped their sons would leave the reservation were significantly more acculturated than those parents who desired their sons to remain on the reservation. The conclusion stated that "Apache parents play a minimum role in vocation selection."

Christian, Chester C. Jr. "The Acculturation of the Bilingual Child." *Modern Language Journal.* 49:160-165; No. 3. March 1965.

Here the effect that insistence on spoken English had on bilingual children is studied. The problem of confusion and frustration which exists when a child learns one language and culture from his parents and then must learn another language and culture when he enters school is discussed. The author maintains the term "acculturation" refers to the destruction of one culture to gain a second culture. He suggested that education should attempt to involve the culture of the child in his education instead of forcing the child to strip himself of the minority culture.

Evvard, Evelyn and Mitchell, George C. "Sally, Dick and Jane at Lukachukai." *Journal of American Indian Education.* 5:2-6; No. 3. May 1966.

In attempting to find if the Scott, *Foresman Basic Readers* are adequate tools to teach Navajo children to read, Evvard and Mitchell discovered that these readers reflect middle class values of the white man. Differences between white and Indian concepts and values with respect to animals, pets, human personality, human expression, games, toys, and home cause minimum comprehension and maximum confusion. These concepts, alien to the Navajo, hinder content comprehension.

Fishman, Joshua A. "The Status and Prospects of Bilingualism in the United States." *Modern Language Journal.* 49:143-155. 1965.

Cultural pluralism may determine the success of this country. In this study, bilingualism and biculturalism are discussed. The author suggested that a commission on bilingualism and biculturalism be established at the federal, state, and local levels.

Haugen, Einar. "Problems of Bilingualism." *Lingua.* 2:271-290; No. 3. August 1950.

Social pressure becomes language pressure when one moves from one linguistic community to another. Linguistic conformity takes place when the learner has acclimated himself to the new environment. This article points out that the bilingual, in the process of learning, goes from "erratic substitution" to "systematic substitution" as he becomes more proficient in the new language.

Johnson, G. B. Jr. "Relationship Existing Between Bilingualism and Racial Attitude." *Journal of Educational Psychology.* 42:357-365; No. 5. May 1951.

Johnson measured the attitudes of bilingual male students toward the Anglo ethnic group and found that a profound knowledge of the Anglo culture or no knowledge of it yielded the least cultural prejudice.

Spang, Alonzo. "Counseling the Indian." *Journal of American Indian Education.* 5:10-15; No. 1. October 1965.

The cultural aspects that must be taken into account when counseling Indian students are reviewed here. Indians have little drive toward changing their lot. They have, as a group, a lack of information no role models, and no reason for achievement; there is no desire to earn much money because relatives will move in. Indians are present-time oriented and have a lack of time-consciousness. The counselor must be careful not to force his value system upon the Indian.

Tanaka, Yasmuasa and Osgood, C. E. "Cross-culture, Cross-concept, and Cross-subject Generality of Affective Meaning Systems." *Journal of Personality and Social Psychology.* 2:143-153; No. 2. August 1965.

Subjects with contrasting linguistic backgrounds were asked to judge twenty-four perceptual signs on ten semantic differential scales. Four semantic factors — dynamism, evaluation, warmth, and weight were found to be the most salient for perceptual signs. The structure of meaning spaces for perceptual signs differs from the structure of those for linguistic signs.

Scales relation were stable across groups, however, between sample consistency was higher within language-cultural boundaries than across them.

Ulibarri, Horacio. "Social and Attitudinal Characteristics of Migrant and Ex-Migrant Workers — New Mexico, Colorado, Arizona, and Texas." *ERIC*. Ed. 011 215. 1964. p. 44.

Ulibarri studied the feelings of the migrant worker or the bilingual person who has not acquired a great deal of formal education. This attitudinal study was conducted with migrant workers in regard to family, health, economics, government, children, religion, and recreation. These conclusions were drawn:

1. "The sample showed present-time reward expectations in all areas.
2. Great timidity and passivity were shown in the areas of education, health, and economics.
3. Satisfaction was shown in family life although the nuclear family had, in most cases, replaced the traditional extended family.
4. They were futilitarian about the education of their children.
5. They showed tendencies of resignation to their economic status.
6. The sample showed definite ethnocentric tendencies."

Ulibarri, Horacio. *Teacher Awareness of Sociocultural Differences in Multicultural Classrooms*. Albuquerque: The University of New Mexico Graduate School, 1959.

Teachers and administrators need to be aware of sociocultural differences as they affect the bilingual. Ulibarri's study showed a general lack of teacher sensitivity toward sociocultural differences.

Witherspoon, Paul. "A Comparison of the Problem of Certain Anglo and Latin-American Junior High School Students." *Journal of Educational Research*. 53:295-299; No. 8. April 1960.

Witherspoon found a general lack of teacher sensitivity toward sociocultural differences of the bilingual also. There are really more likenesses than differences between Anglos and bilinguals, but teachers, counselors, and administrators need to be aware of the main problems involved in the differences.

Zintz, Miles V. *The Indian Research Study, Final Report*. Albuquerque: The University of New Mexico, 1960.

Zintz attempted to identify the cultural, environmental influences of Indian children which must be understood for effective teaching, curriculum, teacher preparation, and parent understanding. Through teacher interviews, questionnaires, and diagnostic tests it was found that the Indian child in public schools is retarded culturally, verbally, and in scholastic achievement. Forced acculturation causes unacceptable reactions. Conflicts existed between cultures, environmental interpretation, values, and language concepts.

C. *An Annotated Bibliography of Studies in Methodology*

Cline, Marion. *Improving Language Arts of Bilinguals Through Audio-Visual Means*. New Mexico Highlands University. Printed in Santa Fe, New Mexico by the author, 1962.

Improved teaching may result from the use of audio-visual aids in working with bilinguals. The results of a two year study using a supplementary audio-visual approach showed that the experimental groups gained more than the control groups, except in spelling. Fewer disciplinary problems, a high level of interest, and longer retention seemed to be the greatest improvements through the audio-visual approach.

Decker, Samuel. "Adapting Audio-Visual Techniques to Language Instruction." *Modern Language Journal.* 42:69-77. February 1958.

Popular music and classical music were used to help teach vocabulary and patterns of a second language.

Finocchiaro, Mary. "Bilingual Readiness in Earliest School Years, A Curriculum Demonstration Project." *ERIC.* Ed. 012 903. p. 28.

Two New York schools, one in a poverty area and one in a middle class area were chosen as the samples in a study by Finocchiaro. A two-year experimental program was conducted to develop "bilingual readiness" in kindergarten and first grade. Efforts were made to choose kindergarten and first grade classes composed of equal numbers of Negro, Spanish-speaking and "other" children. Ability and I.Q. were not considered. In an environment where Spanish was used 65 percent of the time, the children were encouraged to respond in both English and Spanish. The Spanish-speaking children gained more self-confidence and cultural awareness. There was also greater acceptance by the children and their parents in second language learning.

Harter, Helen. "English is Fun, or the Rhythm and Song Approach to the Teaching of English to non-English Speech Beginners." *ERIC.* Ed. 015 035. 1960. p. 92.

An interesting approach to teaching English as a second language to beginning students is outlined in this study. Drills, songs, games, dances, and nursery rhymes are utilized.

Herr, Selma E. "Effect of Pre-first Grade Training Upon Reading and Reading Achievement Among Spanish-American Children." *Journal of Educational Psychology.* 37:87-102; No. 2. February 1946.

Herr worked with two groups of five-year olds. The control group did not attend school while the experimental group went to school an extra year with emphasis on language, and visual and audual perception. Within a two year period, the experimental group showed significantly greater reading achievement.

Johnstone, Marjorie C. and Ferreira, Stella L. "Useful References for Teachers of Foreign Languages." *Modern Language Journal.* 41:309-312. November 1957.

Various types of reference materials such as records, books, reports, journals, film strips, charts, music, games, and vocational opportunities are available, as well as information on other countries in working with teaching foreign languages.

Lancaster, Louise. "Introducing English, An Oral Pre-Reading Program for Spanish-Speaking Pupils." *ERIC.* Ed. 013 454. 1966.

A twenty-eight unit program for teachers of four and five year olds is presented. The use of this material resulted in the children gaining command of spoken English.

Montez, Phillip, et. al. "An Evaluation of Operation Head Start Bilingual Children, Summer 1965." *ERIC.* Ed. 013 667. 1966.

This study showed that in California the Spanish-American is two years behind the Negro, and three and a half years behind the Anglo in scholastic achievement. Assimilation into our culture is made almost impossible due to the divergency of the Spanish culture in terms of the middle class values.

Morris, Joyce. *The Santo Domingo Program of Concept and Language Development.* Albuquerque: The Graduate School, University of New Mexico, 1963. Doctoral Dissertation.

Morris' study was based on the premise that New Mexican Indian children are failing to achieve at a level commensurate with their innate ability because of inadequate language

skills and a meager experiential background. Concrete experiences were provided so these students could relate concepts to the curriculum. Fifteen field trips were planned to transport eighty primary school children to illustrative places mentioned in primary grade social studies and science courses of study. The airport, a train ride, an apple orchard, the TV and radio stations, the telephone offices, Zip Potato Chip factory, Seven-Up Bottling Co., Winrock Shopping Center were included. ESL lessons were written for practice both prior to and following the field trip. Morris' primary concern was making use of pattern practice in teaching the subject matter of social studies and elementary science.

Rohn, Ramona. *Improvement of Oral English in the First Grade in the Santo Domingo School.* Albuquerque: University of New Mexico Press, 1964.

The greatest need of the Indian child in New Mexico's schools is to become more articulate in English. Two Indian groups (Zuni and Santo Domingo) were given the Common Concepts Foreign Language Test. The Santo Domingo children were taken on field trips and exposed to new materials and procedures and then retested. Improvement of vocabulary and other gains were observed. Teachers must understand the difference between cultures and also understand the conflicts that arise because of these differences.

Spencer, Richard E. and Sequin, Edmond L. "The Relative Effectiveness of Earphones and Loudspeakers as a Means of Presenting a Listening Test in a Foreign Language." *Modern Language Journal.* 48:346-349. November 1964.

Two different methods of presenting a foreign test were observed. The experimental group used earphones with individual volume controls and the control group was instructed through the use of a loudspeaker. The performance on the listening test showed that the group using earphones did significantly better than those being instructed via the loudspeaker. No significant gains were made on the reading test. Serious consideration should be given to the communication media in which a language is taught and tested.

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Newsome, Verna L. *Structural Grammar in the Classroom.* Wisconsin Council of Teachers, 1962.

Peal, Elizabeth and Lambert, Wallace. "The Relationship of Bilingualism to Intelligence." *Psychological Monographs: General and Applied.* No. 76:1-23. 1962.

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Roberts, Paul. *English Sentences.* New York: Harcourt, Brace and World, 1962.

Robinett, Ralph F. "Linguistic Approach for the Bilingual." *Perspectives in Reading: First Grade Reading Programs.* Newark, Delaware: International Reading Association, 1965.

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LITERACY IN THE VERNACULAR: THE CASE OF NAVAJO

Bernard Spolsky and Wayne Holm*

After a lapse of almost six months, the Navajo Reading Study resumed activities in January, 1971. Among the activities now in progress are:

Language analysis: The difficult task of correcting and revising the concordance of the speech of six-year-old Navajo children, which, when completed, will provide the data for orthographic and lexical studies;

Language census: Reliability, validity, and individual accessibility sub-studies and an attempt to complete the much more extensive six-year-old language census we began last fall; and

Writing materials: An initial exploration of some of the problems of writing Navajo-language reading materials from several different theoretical viewpoints.

The report presented here is essentially an expanded version of an earlier paper by Spolsky.[1] Summing up the language maintenance study of 1970, it goes on to place the Study in its general context as a contribution to Navajo literacy.

Modern technological society demands literacy: non-literate peoples who wish for modernization must either work to develop literacy in the vernacular, or face the probability of ultimate language loss and consequent loss of identity. An unwritten vernacular language is most vulnerable to destruction when the legislative and educational systems, the economic life, and the mass culture are all conducted in another language. As Kloss (1966) points out, the only factor that by itself seems to guarantee the maintenance of a minority language is religious and societal isolation, something which occurs when a religious group shuts itself away from the rest of society, rejecting not just the language and the values but also many of the invention of the outside world. Such is the case with the Older Order Amish and some other German speaking groups in the United States. A second class of factors influence but do not decide language maintenance: a key item in this group is the existence of a language island. In recent years, with increasing social and population mobility, and the increasing effect of mass communication, only 'very large' islands have chances of survival. Thus, the Spanish-speaking language island of northern New Mexico, the French-speaking one in southern Louisiana, and the German-speaking areas of Pennsylvania and North and South Dakota, were for a long time sufficiently large to maintain language without the support of other factors, but they are no longer able to do this. The absence of extensive literacy in the vernacular may well have been a factor in language loss in these areas, for, even though in each case there was a literacy language available (and one with high status, required for foreign travel or Ph.D study), it failed to be maintained in the schools, the cultural life, the politics and the commerce of the areas once there was regular contact with the dominant language, and was soon replaced by English, at least in those domains.[2]

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1. An earlier version of this paper, with the title "Literacy in the Vernacular: the Navajo Reading Study," was read by Bernard Spolsky at the Council on Anthropology and Education Symposium on Cognitive and Linguistic Studies, 69th Annual Meeting of the American Anthropological Association, San Diego, November 19, 1970.

2. In other domains, too, probably: Tucson six-year-olds, speaking Spanish, give English color names when asked for their favorite colors more than Spanish ones, and many Navajo six-year-olds use English number-names as Navajo words, despite the existence of an extensive base-ten number vocabulary in Navajo. But color and number may be particularly susceptible to borrowing.

With North American Indian languages, the process of loss has been even clearer. Failing to develop as literate languages they have also failed to hold their own in other ways.[3] Acculturation and language loss have gone hand in hand. The case of Navajo seems to fit this paradigm. Virtually all written activities are conducted in English. Tribal Council affairs are conducted more in Navajo than in English although it is now recognized in most communities that a non-English speaking Councilman is at a disadvantage in Window Rock. But all records and all legislative documents are in English. Chapter meetings (something akin to the New England town meeting) are conducted in Navajo. But all records and requests are written in English. Formal Tribal Court sessions are conducted in Navajo unless one of the parties requests otherwise. But, again, all records are kept in English. Thus, despite what is probably the largest absolute number, and largest relative percentage, of native-language monolinguals of any tribe in the United States, the written business of the tribe goes on in English. In official life, then, there is acceptance of Navajo as a spoken language but all written activities are in English.

The communication media present a similar distinction. Mose radio stations on the peripheries of the Reservation broadcast at least an hour or more in Navajo. The transmissions consist of country western music (in English of course) with some news and announcements in Navajo and many advertisements in Navajo. The Navajo-language announcers, however, work from English scripts, translating as they go. The Tribal newspaper, on the other hand, is entirely in English and even the more recently established unofficial papers use English almost exclusively. Navajo words are used very seldom and, when used, are as often as not misspelled. A letter written in Navajo to the Tribal paper congratulating them on having run an advertisement with a few words of Navajo, was never published.

The institution most concerned with literacy, and thus the principal agency of the destruction of Navajo on the Reservation, is of course the school. Mass education is relatively recent on the Navajo: as late as 1948, less than half of the school-age population attended school. It is only in the last fifteen years or so that enrollment has consistently been 90% or better. But, because the average age of the Navajo population is young, 17.5, this means that considerably more than half has now been exposed to education in English.

And it is school that is still the first main source of English for the Navajo. Most Navajo children still come to school speaking little or no English. (Spolsky, 1970). From our survey, in which we obtained reports on 65% of the children in BIA schools,[4] we found that 90% of the six-year-olds were judged not to speak enough English for first grade work. And in data covering just over half of the children in public schools, we still found a predominance of Navajo.

Overall, then, most children come to school speaking little or no English, but almost without exception, classes are conducted in English. There are relatively few Navajo teachers and not all of these are encouraged or allowed to teach in Navajo.[5] There are only two schools, the community-controlled school at Rough Rock and the BIA school at Rock Point, which even approach a school-wide program of instruction in Navajo-language literacy. No public school does so. Together the two programs mentioned may reach 1% of the Reservation school population.

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3. Chafe (1962) estimated that only 40% of the 300 languages or dialects extant had more than 100 speakers, and more than half of these have speakers only of very advanced ages.

4. There are now something like 55,000 school-age Navajo children, about nine-tenths of whom are actually in school. Of those in school about 45% are in BIA schools, 50% in public schools, and the remaining 5% in mission and private schools. Public schools are relatively new on the Reservation, having begun to expand only in the mid 50's. By joint agreement between the Tribal Council and the Bureau, public schools usually enroll those children within a mile-and-a-half (or a mile) of the school or established school bus routes. The wide dispersion of the rural population and the relative lack of roads, causes the public schools to draw larger numbers of students from the emerging towns and from government compounds, and smaller numbers of students from rural areas. Even the latter tend to be those nearer population centers and/or paved roads. Thus the public schools enroll almost all of the small numbers of non-Navajo students and a larger proportion of the more acculturated Navajo students; the Bureau schools tend to enroll less acculturated students.

5. A racial census taken by the U. S. Office of Civil Rights reports roughly one Indian teacher for every 200 Indian children in the Public schools of New Mexico—89 / 17,721 (New Mexico Review, November 1970). But these 89 Indian teachers are not all Navajo. Nor is there any assurance that the Indian teachers are teaching children of their own language, as can be seen by an analysis of comparable figures from the Navajo Area, Bureau of Indian Affairs. There one finds a ratio of roughly one **Indian** teacher for every 240 Navajo children, but roughly one **Navajo** teacher for every 450 Navajo children—91 and 49 / 21,942 respectively. Put another way, while perhaps one of every nine teachers (and one of every four administrators) is an Indian, only one of every **twenty** teachers (and one of every nine administrators) is a Navajo. We have no data for the Arizona or Utah public schools but know of no reason to think the ratios would be significantly different from those of New Mexico. The Point is that despite a real increase in the number of Navajo teachers, there are still, absolutely or proportionally, relatively few in the classroom with Navajo children. It is to be hoped that the increasing number of Navajos in college (over 1200 this year) will begin to change this picture.

Even when the educational system is ready to start programs in Navajo, the absence of written materials serves as a major barrier. Why there is no material becomes clearer when we look at the historical picture.[6] There have been a number of attempts at developing Navajo literacy. The earliest were the efforts of Roman Catholic and Protestant missionaries; by 1910, each had developed a separate writing system and had begun publishing materials. The Bureau's lay literacy program of the late 1930's was part of the Collier administration's new program of respect for tribal integrity which replaced the earlier policies of forced assimilation. For some time, it had been apparent that the children were not succeeding with a curriculum entirely in English, and it was also apparent that the vast majority of the adult population could not speak English. A practical alphabet was developed using for the most part the same symbols as the English alphabet.[7] A first primer was prepared in Navajo and other readers in Navajo followed. In 1940, the teaching of reading and writing of Navajo became part of the curriculum in some schools at least. Admittedly, the main purpose of these bilingual readers was to teach English, but, for the first time Navajo was permitted after the child's entry into school, and was even encouraged in the classroom. Children were often allowed to take their books home and read to their parents who got a new vision of schooling when they understood the reading of the Navajo text.

At the same time an adult literacy campaign began. The demand for teachers far exceeded the supply; nevertheless there were soon people in many communities who could read their own language, and it was proposed that forms and regulations be written in Navajo. The government began to translate articles for conservation, livestock management, and health. In 1946, a Navajo language newspaper was started that continued publication until 1957. Through the newspaper, concepts such as "sheep unit" were explained, and news of Tribal Council affairs, Tribal laws, and the outside world was published in Navajo. The second World War took much of the impetus out of the literacy program. For the first time, large numbers of Navajos came into sustained contact with non-Navajos—as servicemen and working off the Reservation. For the first time they saw that their lack of English placed them at a disadvantage. A public demand grew for more and better education and for education in English. This, in the context of a nation-wide distrust of differences as being un-American, and a governmental policy of transition to state Public schools, was fatal to the relatively modest Navajo language programs. They had all disappeared by the late 50's.

The Special Program for Navajo Adolescents, initiated by the Bureau in partial answer to these demands after World War II illustrates the place of English. It was noted that nearly half the school-age population were over twelve, and that there were great numbers in this age group who had had little or no schooling. Intensive short-term programs (five-year, and later six- and eight-year programs) were set up in ten off-Reservation boarding schools to teach these students "to speak, read. write, and think in English" with the basic purpose of making it possible for them "to obtain and hold a permanent job away from the Reservation." At first, interpreters were used in teaching but it was clear that Navajo had its place only to help in the teaching of English. Since there was little available material designed for the teen-age reader with limited English, a bilingual series, the *Navajo New World Readers*, was developed. Basic emphasis was on preparation for leaving the Reservation, something which called for a mastery of English; the use of Navajo was only means to this end.

But, by the mid 1960's, these programs for Navajo literacy were virtually dead, except for some adult missionary activity in adult literacy. The Wycliffe Translators have prepared primers, charts, and teaching aids, educational as well as religious in aim.[8]

Against this background, we may look at the effect on the language situation. Inadequate as most school programs aimed to teach English have so far been, there has then been steady loss of Navajo. We have tried to measure the extent and rate of loss in a study we made of the language spoken by six-year-old children coming to school in the fall of 1969. Recognizing the importance of school itself as a factor affecting language loss, we chose to look at the six-year-old before he had been contaminated by the school situation. Whatever other measures of language maintenance may be used, one of the most important is the parents' choice of language to speak to their children. For instance, while one may find parents with strong ethnic or national or religious ties choosing to have their children learn an ethnic language in school or church, the fact that they themselves choose to speak

6. This section draws on an essay by Penny Murphy (1970).

7. The unfortunate exceptions were the "slashed l", the nasal hook, and the grave accent which do not occur on English typewriters.

8. A list of Navajo reading material available is given in Spolsky, Holm and Murphy.

English to their children at home is the best guide to their basic attitude. Similarly, when one finds a tribe expressing interest in having its language taught in Head Start programs and elementary school one is tempted to see this as evidence of a strong desire to maintain the language; but in fact this may reflect the situation that English is now the first language of the children. Official tribal policy in such a group may be language maintenance but the real home policy is to switch to English. Similarly, one finds another tribe refusing to have its language used in school, reflecting not the rejection of the language but a strong desire to retain it uncontaminated for home and in-group use. Home language decisions are more crucial than publicly expressed opinions.

In our study,[9] we used a simple questionnaire completed by teachers in schools on or near the Reservation. The teachers were asked to judge each Navajo six-year-old in their classes on a five point scale, as follows:

N: When the child first came to school, he or she appeared to know only Navajo, and no English.

N-e: When the child first came to school, he or she appeared to know mainly Navajo; he or she know a little English, but not enough to do first grade work.

N-E: When the Child came to school, he or she was apparently equally proficient in English or Navajo.

n-E: When the child came to school, he or she knew mainly English, and also knew a bit of Navajo.

E: When the child came to school, he or she appeared to know only English, and no Navajo.

The data gathered from these questionnaires were then correlated with two measures of acculturation, the type of school and the distance from the nearest off-Reservation town.

The results of our survey permitted the following generalizations:

1. Overall, 73% of Navajo six-year-olds in the study (virtually complete for BIA schools, and including several of the largest public school systems)[2] come to school not speaking enough English to do first grade work.

This first generalization results from treating columns N and N-e of the questionnaire as the criteria for determining a child's lack of ability to do first grade work in English. When our entire sample (including BIA and public schools) was tabulated, the results indicated that 88% of the 1510 children in the Bureau sample were judged incapable of beginning first grade work in English, and 57% of the 1383 children in the public schools were similarly rated by their teachers. Still anther way of looking at these figures would be to say that in Bureau schools, less than 1% of the children are English monolinguals, and less than 3% are English-dominant. Even in public schools less than 10% of the children are English monolinguals and less than 20% are English-dominant. Those who are not English-dominant (E or n-E) are Navajo speakers; most of those can be assumed to speak Navajo at home. Thus we found clear evidence that a large majority of Navajo children are still speaking their language at home.

2. The farther a school is from an off-Reservation town the more likely its pupils are to speak Navajo.

This second generalization follows the establishment of an index to indicate the relative ease of access of the various schools involved to off-Reservation towns. We determined our accessibility figures using Map No. 2345, "Indian Country," published by the Automobile Club of Southern California. Distances on improved roads were taken at face value, but those on gravel, graded dirt, and ungraded dirt were multiplied by two, three and four respectively on the assumption that the poorer the

9. The study, reported in Spolsky (1970), was supported by the United States Department of the Interior, Bureau of Indian Affairs, Navajo Area Office, Contract No. N00 C 1420 2848. The follow-up study referred to below is being partially supported by a second contract, No. N00 C 1420 3462 and by a gift to the University of New Mexico from John Nuveen and Company.

road, the less convenient and the less certain the access—especially in bad weather. When we compared the accessibility figure for each school with an index of the amount of Navajo spoken by six-year-olds in the school, we obtained an overall correlation coefficient of .517. Considering there are many other potent factors accounting for language retention, this is quite a respectable correlation. This factor of accessibility also seems to account for the difference in amount of English spoken in each of the five Agencies, and probably also for a portion of the differences between the Agencies found in academic achievement on standardized tests.

3. The farther children live away from Reservation population centers and/or paved or all-weather roads, the more likely they are to speak Navajo at home.

Generalization 3 also deals with a kind of accessibility but is best explained by the way a child is enrolled in a public school or a BIA school. The data bore out the hypothesis that public school children speak relatively more English and less Navajo than their Bureau school counterparts. As noted earlier, despite overlap and inconsistences, the enrollment of the public schools tends to be drawn from Reservation population centers—from the emerging towns and government compounds—and from along the paved highways and other all-weather roads. They draw, in other words, from just the population one would expect to be more acculturated. Public schools themselves vary greatly: the number of non-Navajo students in the school and the number of Navajo students whose home language is English are probably both a function of accessibility. This finding contradicts Sasaki and Olmsted (1953) who discounted differences in types of schools: "Regardless of the type of school attended. . ., it is the Navajo with the longest attendance at school who have the greatest proficiency in English. . ." (p. 98). There are several reasons why they had to disregard such differences and we cannot. The one is that in 1955 on-Reservation public schools were in their infancy; none of the adults in their sample had attended public school (p. 96-97). The other is that in studying only 86 adult males, with great differences in age, military service, off-Reservation work experience, length of schooling, type of schooling, and English proficiency, only the correlation between length of schooling and English proficiency showed up. In our study where differences in length of schooling were at a minimum, a correlation between accessibility and English proficiency became apparent. And as type of school tends to be a function of accessibility, a correlation between type of school and English proficiency also appeared. Sasaki and Olmsted do cite something like accessibility by way of partial explanation of the apparently much higher level of English language skills at Fruitland than on the Reservation as a whole.

There are a number of questions unresolved in this preliminary study that we will attempt to cover in a later survey. First, we did not reach the entire six-year-old population. We guess that we have data on about 65% of the children in BIA schools, and 55% of those in public schools. The BIA schools missing are generally in less acculturated areas, and we did cover the two largest and most urbanized public school systems. Second, we did not allow for the effect of preschool programs. We asked for, and obtained information about six-year-olds. More and more children are entering school earlier each year: the Bureau has a small number of kindergartens, and the Office of Navajo Economic Opportunity conducts pre-schools in most Chapters on the Reservation. Some of these are beginning to reach children younger than five. Attempts to determine which children have had prior school experience are extremely difficult, for teachers in the larger schools often don't know much about the child's home community. Thus the figures for six-year-olds include a significant number of children who have had some prior pre-school experience; if anything the language ratings exaggerate the amount of English learned at home. Third, it can be argued that because very few of the teachers are Navajo or speak the language, their judgement of their pupil's proficiency in Navajo is unlikely to be adequate. We are now studying the effect of this: we believe there are equally plausible reasons for arguing they will over-estimate or underestimate knowledge of English.

Finally, as noted above, there is some overlapping and inconsistency in the essentially dual school system of the Reservation. Some children may ride some distance past a Bureau school to attend public school. Some children may board at a Bureau school which is some distance farther from home than the nearest public school. That the accessibility correlation is as high as it is is rather persuasive evidence of its explanatory power.

Navajo, we found then, is still the main language of the area, but as more roads are built, as more children complete school, as the Reservation is more exposed to the outside world, there is steady increase in English. And the absence of Navajo literacy is a potent factor in this shift.

Let us consider some of the factors that may explain the relative slowness of the development of

genuine bilingual programs or of Navajo literacy. When reading and writing is an alien thing and associated with alien elements of the culture, it is not surprising to find reluctance to associate them with one's most precious possession, language. But that this need not be so is evidenced by two strong vernacular literacy movements of the 19th century: Cherokee and Maori. In both cases, reports suggest that once the peoples were given the opportunity of learning to read and write in their own language they did so with great rapidity. In both cases there was an extremely high standard of adult native literacy. In New Zealand, for instance, over a thousand items were printed in Maori between 1815 and 1900; in 1872, Bishop Colenso wrote a text book for teaching Maoris to read English remarking in the preface (which was written in Maori) that seeing they could already read their own language so well, they should have little trouble in learning to read a second one. But school policy soon destroyed this promising development. Maori was banned from schools soon after 1870 and not tolerated again until 1930. Only in the last few years have there been any signs of encouraging its use again.

In the Cherokee Nation, the use of Sequoyah's syllabary spread with great rapidity. Within a decade or two, 90% of the Western Cherokee were literate in their own language. By the 1880's, the Western Cherokee were not only highly literate in Cherokee but also more literate in English than were the English-speaking population of the adjacent states, Texas and Arkansas. Extensive publishing in Cherokee continued until the government's confiscation of the press in 1906. Within the last decade there has been a revival of interest in written Cherokee and renewed religious, educational, and publishing activity.[10]

The literacy movement for Navajo at no stage developed the impetus of these other two movements; the pre-war campaign was too closely associated with the stock reduction program, the post-war program too closely associated with relocation to develop any genuine popular support. Literacy in Navajo remained an alien concept.

But there have been more recent attempts at reviving Navajo literacy. These newest attempts have more promise of success, for two factors are converging to support them. The first is the change in educational climate. There is growing evidence to support the notion that teaching reading is easier in a child's strongest language. Thus, it is possible to persuade educators that children should be taught to read in the vernacular. Evidence from such studies as Nancy Modiano's has convinced many educators that it is worth trying. With this sort of encouragement, the Bureau of Indian Affairs has been prepared to offer some degree of minimal support to two or three pilot programs. But even here, the limited amount of research data, as Venesky (1970) points out, leaves the issue in reasonable doubt. Faced with a situation where so many children still speak Navajo, there are two main strategies: native language literacy, or effective standard language teaching. Some reading experts tend to feel the solution is standard language teaching: while many of us with language teaching background find native language literacy more promising. Presumably, this suggests neither of the techniques has yet been shown to be effective.

The second factor is probably even more important, for it involves pressure from within the Navajo people rather than from outside. It is exemplified by the community school movement: there is increasing pressure for the Navajo communities to control their own schools. The examples of Rough Rock Demonstration School and now of the Ramah Community High School are applying pressure to the BIA and state school systems to pay much more attention to the wishes of the community. And the newly developed Dine BiOlta Association is starting to become a force in education on the Reservation. So far, these Navajo groups have stressed the importance of the Navajo language. The programs are new and undeveloped, but there is a firm commitment to the use of Navajo throughout the school, to the teaching of reading in Navajo, and language maintenance.

For the first time, then, there are signs of pressure from the Navajos themselves for literacy in the vernacular: the next few years will tell whether the combination of educational need and growing nationalism will be enough to produce permanent results, and to lead to widespread literacy in Navajo.

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10. See Walker (1968) and White (1962).

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PLANNING CONFERENCE FOR A BILINGUAL KINDERGARTEN PROGRAM FOR NAVAJO CHILDREN

Conclusions and Recommendations

October 11-12, 1968

INTRODUCTION

In May 1968 the Bureau of Indian Affairs of the United States Department of the Interior commissioned the Center for Applied Linguistics to organize and conduct two separate meetings of specialists in early childhood education, ling[illegible] anthropology, and related fields as the first phase of a project for the organization of bilingual kindergartens for Navajo children in the care of the BIA. The meetings were (1) to outline a bilingual kindergarten program in which the Navajo language would be the main medium for kindergarten activities, with oral English being introduced as a subject; and (2) to provide guidelines for the preparation of teachers for such a program. The present report constitutes the summary of the first meeting, held October 11-12, 1968.

The meeting was the direct outcome of the recommendations of *The Study of the Problems of Teaching English to American Indians* conducted by the Center for Applied Linguistics for the Bureau of Indian Affairs in 1967. This is one of the four interrelated projects designed to improve American Indian education through giving special attention to the teaching of English to American Indians. The other three projects involve the preparation of a series of articles for the classroom teacher, based on contrastive studies between English and three languages spoken natively by children in BIA schools; a newsletter for teachers and others involved with the teaching of English to American Indians in BIA schools; and the organization of a conference of specialists in psycho-linguistics, the study of child language, child psychology, Indian cultural anthropology, and related fields to outline feasible research projects to investigate the ways in which the styles of learning employed by Indian groups may be related to the school achievement of the Indian student.

The first planning meeting was held at the Brookings Institution, Washington, D. C., October 11-12, 1968, under the chairmanship of Sirarpi Ohannessian, Director, English for Speakers of Other Languages Program, Center for Applied Linguistics. Consultants at the meeting included Milton E. Akers, National Association for the Education of Young Children; Herbert Blatchford, Gallup Indian Community Center; Vera P. John, Ferkauf Graduate School of Humanities and Social Sciences, Yeshiva University; Nancy Modiano, School of Education, New York University; Rose D. Olver, Department of Psychology, Amherst College; Muriel R. Saville, Department of English, Texas A&M University; Rudolph C. Troike, Department of English, the University of Texas at Austin; and Oswald Werner, Department of Anthropology, Northwestern University. The Bureau of Indian Affairs was represented by Evelyn Bauer and Tom R. Hopkins of the Curriculum Branch; Wayne Holm, Rock Point Boarding School, Chinle, Arizona; and Faralie S. Spell, Navajo Area Office, Window Rock, Arizona. The meeting was also attended by A. Bruce Gaarder, Richard L. Light, and Mrs. R. George Mylecraine of the Office of Education, and by Daniel P. Dato, School of Languages and Linguistics, Georgetown University. Observers from the Center for Applied Linguistics included John Lotz, Director of the Center, John H. Hammer, Alfred S Hayes and Patricia A. Johansen. Recorders were Dorothy A. Pedtke and Bernarda Erwin of the English for Speakers of Other Languages Program.

The morning of the first day of the meeting was devoted to discussions of relevant background to the conference. After welcoming remarks by Dr. Lotz, Miss Ohannessian outlined the purpose of the meeting and gave a summary of the Center's involvement in BIA projects. Mrs. Bauer then outlined the development and current status of the BIA kindergarten program. Next, Dr. Akers described the Dilcon project, a kindergarten teacher training program undertaken for the BIA in the summer of 1968 by the National Association for the Education of Young Children.[1] The Brengelman-Manning kindergarten project in Fresno County, California, was then presented by Dr. Sa-

1. See **A Kindergarten Curriculum Guide for Indian Children: A Bilingual-Bicultural Approach**, Preliminary Draft, BIA-NAEYC Kindergarten Training Project, Dilcon School, Summer 1968.

ville.[2] Two studies carried out in Mexico, one of reading comprehension and one on cognitive and personality development, were then summarized by Nancy Modiano.[3] Mr. Holm then reported on materials preparation currently contracted by the BIA to Robert Wilson of the University of California at Los Angeles and to Mary Jane Cook of the University of Arizona. Mr. Holm and Dr. John also reported on the Good Samaritan bilingual kindergarten in San Antonio, which combined both Bereiter-Engelmann and traditional kindergarten approaches. Mr. Holm briefly described the teaching of reading in Navajo at Rough Rock Boarding School. He next described bilingual classrooms at the beginners' level at Rock Point Boarding School. Mr. Blatchford commented briefly on the Navajo Community College. Dr. Dato began the afternoon session with a report on his research on the free acquisitions of a second language by young children. The rest of the session was devoted to a discussion of the educational, cultural and linguistic goals for a bilingual program, to the specific goals and content of the curriculum, and to problems related to the use of Navajo as a medium of instruction and to the teaching and use of English in kindergarten activities. An informal evening session for the consultants was devoted to further discussion of goals and approaches.

The Saturday session was devoted to the preparation of Navajo and non-Navajo teachers for the bilingual kindergarten, to the special needs of each as well as to common needs. Recommendations on the curriculum and on the preparation of teachers as well as methods of implementation concluded the afternoon discussions.

CONCLUSIONS AND RECOMMENDATIONS

The conference had a particularly challenging task in drawing up recommendations for the planning of bilingual Navajo-English kindergartens since both the idea of kindergartens and the concept of conducting any classroom activity in the mother tongue of the child were very new developments in the BIA educational system. This lack of precedent made it necessary not only to consider the various theoretical and practical aspects of planning a program, but also to include discussions on policy. Although the main task of the meeting was to consider the linguistic aspects of such a program, it had been considered essential in organizing it to draw upon a number of disciplines in order to be able to present a viable and balanced program to the BIA. Consultants therefore included specialists in linguistics, psycholinguistics, Indian culture, early childhood education, child psychology, and the teaching of English as a second language. In addition there were representatives of the Office of Education as well as the Bureau of Indian Affairs. Because of the diversity of background, experience, and interest among the consultants and participants, there were often sharply differing points of view, although there were also wide areas of agreement. The recommendations in the following pages are based on the areas of general agreement, though division of opinion, where relevant, is reflected in the discussions preceding the specific recommendations.

I. RECOMMENDATIONS CONCERNING GENERAL POLICY

The conference was in complete agreement in its endorsement of the concept of bilingual kindergartens for Navajo children. The importance of beginning the child's education in his own language and in his own cultural background, building a sense of security and pride in his own culture, and the need for strengthening this sense of pride were stressed again and again during the conference. Indeed, the conference felt that to be truly effective bilingual education should be extended into the elementary school, though it was realized that attempts to use Navajo at higher levels might increase the already existing problems in the use of Navajo as a medium of instruction, the teaching of Navajo to those who are monolingual in English both in purely Navajo and mixed schools, and the preparation of materials and teachers for instruction in and through the medium of the Navajo language. These problems will be discussed in later parts of this report as they relate to the planning of the various aspects of bilingual kindergartens.

The conference was in equal agreement on the vital importance of involving Navajo parents and the Navajo community in the education of their children and in the decisions as to the type of education

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2. See Frederick H. Brengelman and John C. Manning, **A Linguistic Approach to the Teaching of English as a Foreign Language to Kindergarten Pupils Whose Primary Language is Spanish,** Washington, D. C.: USOE, 1966; and Muriel R. Saville, **Teaching English: A Linguistic Approach to Teaching English as a Second Language to Students Whose Primary Language is Spanish,** Washington, D. C.: USOE, 1965.

3. See Nancy Modiano, **A Comparative Study of Two Methods of Teaching Reading in the National Language,** Washington, D. C.: USOE, 1966; and Nancy Modiano and Michael Maccoby, **Cultural and Sociological Factors Relating to Learning Development,** Washington, D. C.: USOE, 1968.

that was needed, though it was pointed out that the academic community should not absolve itself of all responsibility. It was also pointed out that there was a great variety of attitudes among Indian parents and leaders towards the teaching of Navajo language and culture in the schools, and that many felt these were better taught by parents at home. Although some participants felt that there was considerable evidence that Indian parents appreciate bilingual education for their children, others felt that there was insufficient information on what Indian parents really thought on the subject and that further documentation and self-evaluation of the community were needed. Participants felt strongly that the principle of choice for the Indian community should be taken seriously and that provision should be made for elasticity of program and variety of selection whenever possible and that the stated needs and wishes of the Indian community should be taken into account in planning for them.

Members of the BIA present assured the conference of the Bureau's policy that bilingual kindergartens would operate only in areas where they were requested by the local chapter, school board and parents and would be entirely voluntary. Since the project was experimental in nature, the conference felt that it was essential to make every effort to make it a success because on its acceptance would depend not only the future of bilingual kindergartens but also the possibilities for bilingual education at higher levels. The conference agreed that it was essential to provide as much information as possible to parents and the Indian community on what was being planned and to enlist their cooperation from the very start. It was suggested that a publicity drive be launched to explain the purpose and nature of the bilingual kindergarten to the Navajo community. Participants, however, felt that the project should not be presented as a panacea and that care should be taken that the publicity be strictly informational in nature rather than a selling campaign.

The conference was also in agreement that general information on bilingual education, especially for the early levels, would be very helpful in planning bilingual programs for Indians. Within the United States several institutions are collecting information on bilingual programs. In Canada the International Center for Research on Bilingualism at Cite Universitaire in Quebec is a repository for such information. There are also bilingual programs carried out by such countries as Denmark (in Greenland), the USSR, and Mexico. The conference considered that having information on such programs would be of great importance in the planning and carrying out of programs such as the presently contemplated one.

Specific Recommendations on Policy

1. The conference recommends that the BIA sponsor a community-wide survey of the attitudes of Navajo parents and community leaders towards goals and needs in education of their children in general, and towards the concept of bilingual education in particular, especially at the kindergarten level.

2. The conference recommends that information on the purpose and nature of bilingual kindergartens now being planned for the Navajo community be widely disseminated among the Indian community through (a) a series of three articles commissioned by the BIA to appear in Navajo newspapers; (b) the use of Navajo radio; and (c) addresses by Navajo professionals to chapter meetings.

3. The conference recommends that if it is not already being done, the BIA sponsor a project for the collection of information on international programs for bilingual education at kindergarten and early school levels in countries where a situation similar to that of American Indians obtains.

II. RECOMMENDATIONS CONCERNING THE BILINGUAL CURRICULUM

There was general agreement with the policy that most kindergarten activities should be conducted in the language of the child at the start of the program, and that this language should be the main medium for activity throughout the program. It was also agreed that oral English should be introduced and taught as an integral part of the program in preparation for transition to the English medium instruction which obtains in both state and BIA elementary schools at present. The proportion of Navajo and English to be used for kindergarten activity was discussed, but no conclusions were reached since it was felt that this would depend to a large extent on local circumstances including he amount of English already known by children, the needs of the community, the wishes of parents, the availability of staff and materials, and other considerations. At this point, and at many times

during the conference, it was stressed that elasticity and provision of a number of models to choose from should be aimed at.

The conference saw many advantages in the use of the mother tongue as the primary medium of activity. It would make the transition from home to school far less traumatic than if the child was faced with a new language as well as a new environment; it would provide the child with a teacher with whom he could identify both in respect to language and culture; and because of this identification and rapport with the teacher it would provide for greater success in learning even if the teacher were less qualified than one who spoke only English; it would spare the child the burden of acquiring knowledge through a language insufficiently mastered at this critical period in the development of his intelligence; and it would provide a more favorable setting for concept development and cognitive activity in general. As one participant put it, it would keep open the channel of Navajo while it built up the channel of English for the transmission of intellectual information.

A. *Goals and Content of the Curriculum and Language Problems*

The conference was fortunate in having the preliminary draft of *A Kindergarten Curriculum Guide for Indian Children* developed by the National Association for the Education of Young Children at Dilcon, with Dr. Mary Lane as coordinator. The Guide served as a background and a point of departure for the discussions on various aspects of the curriculum such as language and concept development through curriculum experiences, the development of natural and physical science concepts, and of social living and mathematical concepts.

Perhaps the most important point that was made during the discussions was the necessity for relating kindergarten activity to the linguistic and cultural background of the child. Classroom activity, it was stressed, should begin with what the child brought with him as experience in situation and content and should be related to the recurrent events of his daily life. There was general agreement that the curriculum should be so planned that it proceeded from Navajo to English in situation and content rather than the reverse, with a caution against starting from a middle class white curriculum and adapting it to Navajo. For example, aspects of the child's culture such as kinship terms and patterns of behavior toward paternal and maternal sides of the family could be used in the development of social science concepts. In teaching the concept of classification one might start with the Navajo verb system in which verbal forms relating to the movement of objects, for instance, involve eleven or more classes, each distinguished by separate groups of stems, including those used for roundish, bulky objects; non-compact or fluffy objects; slender, still objects; mushy substances; single, flat, flexible objects; things bundled together to form a pack, and so on.[4] The subtle spatial relations in Navajo could be used in teaching mathematical, especially geometrical (topological), concepts and the notion of 'set' could be based on familiar objects in the classroom and the child's experience. There was general agreement that the curriculum should be so planned as to dignify Navajo life and culture, and enhance the self-concept of the child. As the year progressed, curriculum content might gradually be broadened to include activity through the medium of English as the child learned the new language.

In view of the urgent necessity to plan a bilingual kindergarten program for next year, it was considered very important to give immediate thought to the preparation of materials along the lines suggested above, and under the guidance of specialists. Before recommendations are made, problems related to the use of Navajo as a medium of instruction, the inclusion of Navajo culture in the curriculum, and the teaching of English will be considered.

(a) *Problems Related to the Use of Navajo Language*

One important problem related to the use of the Navajo language as a medium of instruction was that there was almost no precedent for its use in the formal school situation and very few people with sufficient training and experience to use it in such a situation. Regional variation, apparently mainly at the lexical and to a lesser extent at the phonological levels, generational variation, and the lack of a standard form of the language, as well as lack of much technical vocabulary were serious problems for the presentation of content. Any plans for using the Navajo language for formal instruction in school, therefore, made it necessary to give immediate attention to the question of terminology and

4. Robert W. Young, **English as a Second Language for Navajos: An Overview of Certain Cultural and Linguistic Factors**, Albuquerque: Navajo Area Office, Division of Education, 1967, pp. 58-60.

building on the resources of Navajo to create technical vocabulary for curriculum development and for the preparation of materials. The conference suggested that consideration be given to the use of tape and video tape as an integral part of materials preparation.

Since the preparation of materials in Navajo presupposes a writing system, the problem of Navajo orthography was discussed at some length. Although some people maintained that only the spoken language should be used at the kindergarten level, others insisted that to communicate effectively with the teacher it was necessary to resort to some written material. Some participants suggested bringing together a number of specialists who had worked on the language to work on a writing system. Others said it was too late to advise another new system and that there were two very similar well established writing systems in both of which there was a considerable body of published material.[5] It was finally suggested that a solution could be reached based on existing scripts and the necessity for adopting an acceptable writing system was agreed upon.

There was some discussion as to whether the curriculum should include a reading readiness component, and if so whether this should be for Navajo or English. The conferences assumed that Navajo-speaking children should first learn to read in their own language and that some attention should be given to pre-reading activity at the kindergarten level.

(b) *Problems Related to Incorporating Navajo Culture in the Curriculum*

Beside the necessity of basing teaching on the cultural background of the child through adequately prepared materials, the conference was in agreement that there should be deliberate teaching of Navajo culture in the kindergarten. Although it was pointed out that some Navajo parents felt that its teaching could be left to the home, the conference was in general agreement that a systematic presentation of the various aspects of Navajo culture would be very desirable in the kindergarten. For this purpose it was considered necessary to have written and taped materials on Navajo culture for the Navajo teacher. The question of Navajo culture will be discussed further in the section on the preparation of teachers.

(c) *Problems Related to the Teaching of English*

As an integral part of the bilingual program the teaching of English to Navajo children was discussed both from practical and theoretical points of view. As mentioned before, the proportion of time to be devoted to it was briefly discussed with the conclusion that each kindergarten would have to make its own decision based on local conditions. The attitude of parents, some of whom were said to attach considerable importance to the learning of English, was also discussed, and some participants expressed their own convictions that English was of great importance to the Navajo both for his further education and as a means of competing in the wider American community if he so wished.

One practical problem was the fact that children would come to kindergarten with widely varying amounts of English — some with no English at all and some as monolinguals in English. However, it was felt that even monolinguals in English might need instruction in the language since often they could command only limited levels of it, having acquired it from parents and siblings whose English was faulty.

The area in which there was perhaps least agreement was the problem of how to teach English at kindergarten level. There were those among the participants who believed in a "play" approach to second language teaching at the early childhood level, relying on exposing children to the teacher's language and providing them with experiences, songs, games, and other play activity that would elicit language and participation in activity. There were others who believed in more formal instruction, presenting language through linguistically structured materials with a certain amount of repetitive drill, refrains, etc., but also relying on the situational approach and on songs, games and other activities. In such activities the language presented could be systematically based on the sounds, structures and vocabulary of English to be taught, at the same time taking account of problems of interference from Navajo. There were yet others who felt structuring should take place at a higher level and that the presentation of materials should be controlled on this basis, but it was not made clear what classroom techniques were being advocated for this approach. Since compromise seemed difficult to

5. The systems mentioned were those used by Robert W. Young and William Morgan, and the almost identical orthography of God Bizaad, the Navajo translation of the Bible.

attain it was suggested that several models be worked out, offering alternative approaches. These models, if put into practice, could form part of a long-term experimental project.

It was the general feeling of the conference that very little was known about the process of second language acquisition at this early age. It was noted that the few existing studies appear to indicate that the learning process is systematic though intake may seem random and each child may appear to be learning differently. It was felt that major research was badly needed in this particular area. The suggestion was made that what research and information is available on second language acquistion at the early childhood level be brought together and presented in simple terms, perhaps in a handbook for the teacher and layman.

One area on which there was agreement was the necessity for drawing up a list of English structures and vocabulary items to be covered during the course of the kindergarten year, with indication of interference problems from Navajo at phonological, morphological and syntactic levels. The list could perhaps be incorporated in a handbook for teachers and form the basis for the preparation of materials for teaching English to Navajo children. Such materials were judged to be very necessary. (The teaching of English to Navajo children will be taken up again in the section on teacher preparation.)

Specific Recommendations on the Curriculum

4. Since written material in Navajo will be necessary both for purposes of curriculum development and teacher training, the conference recommends that the BIA appoint a small committee of linguists and qualified Indian educators to agree on an orthography that may be adopted for use in the BIA educational system. The conference suggests that existing scripts in which a sizeable amount of literature exists be considered for adoption or adaptation.

5. The conference recommends that as a first step towards the development of a curriculum in which the Navajo language will be the medium of instruction at the kindergarten level the BIA appoint a Navajo Curriculum Committee with representation from the Tribal Education Committee and including specialists in linguistics, Indian culture, and early childhood education to guide the development of such a curriculum and eventually the preparation of materials in Navajo.

The specific tasks of the Committee would be to appoint a number of sub-committees to work on the following areas and to guide their work:

(a) The drawing up of a list of terms and technical vocabulary that may be needed for use in the various areas of the curriculum, and to agree on the adoption of various terms.

(b) The development of curriculum content in the several areas of kindergarten work. The conference urges that the work be based on the linguistic and cultural background of the child and be carried out on the lines suggested in the discussions above.

(c) The development of materials for each area of the curriculum for the use of the teacher, with accompanying suggestions on techniques of classroom presentation and, where necessary, tapes and video tapes.

6. The conference recommends that the BIA take immediate steps towards the development of an English curriculum embodying a list of structures and vocabulary items of the language that should be covered in the first year of oral English for the Navajo kindergarten child. The conference believes that preparation of actual materials for oral English based on the specific problems of Navajo children, with suggestions for classroom activity to the teacher, would be of immense help to the kindergarten program. It suggests that such preparation be undertaken as soon as possible.

7. The conference recommends that the BIA sponsor a long-term research and experimentation project on the problem of second language acquisition at the early childhood level. Since such research is of vital importance for all bilingual projects in the country, the conference suggests that funds be sought from other government agencies and departments such as the Office of Education, the Office of Economic Opportunity, as well as private sources such as foundations.

8. The conference recommends that the findings of research carried out so far on second language

acquisition by pre-school children be collected and presented in non-technical language for the use of teachers.

III. THE PREPARATION OF TEACHERS

The Conference assumed that it would be necessary to prepare two categories of teachers for a bilingual kindergarten: the first would be prepared to teach through the medium of the Navajo language and to be responsible for the teaching of Navajo culture, and the second to teach English and conduct some teaching through the medium of English. They are referred to as "Navajo" and "non-Navajo", respectively, in this report.[6] The time envisaged for the training program was approximately six weeks in the summer of 1969.

Discussions ranged over a very wide area, concentrating mainly on the various components of the training program, but also including the problem of staff for the training program, policy matters of recruitment and selection, and follow up. The discussions were not always realistic in terms of what could be achieved within the limited period of six weeks of training and with the resources presently available for such training. In summarizing the discussions the following paragraphs will again concentrate on the linguistic and cultural aspects of the training program, but will also attempt to present some points of view regarding other policy matters.

Components of the Training Program

(a) *The Navajo Language*

The Navajo Teacher. Discussions on the curriculum made it evident that one of the first requirements of the Navajo teacher would be literacy in his own language. His training, therefore, should include the development of a high degree of literacy in Navajo. For this purpose the conference felt that it would be necessary to collect or prepare graded reading materials.* (The suggestion was made that such materials could also be used with groups of parents who wished to become literate in their own language.)

In addition, the conference felt that the Navajo teacher should study the oral form of his language and acquire some sophistication in its grammatical structure, not only to gain an understanding of how it works, but also to develop a sense of introspection about it, and to enhance his pride in it.

The Non-Navajo Teacher. The conference felt that all non-Navajo teachers should be given instruction in the Navajo language. The purpose of this would be: to give them a means of communication with children and parents; to subject them to a language learning situation which would help them to gain insight into the feelings of the Navajo child learning a new language; to show them techniques of teaching a new language which they could then apply to their teaching of English; and to help them acquire an understanding of the way the Navajo language works. The conference felt strongly that a knowledge of Navajo on the part of the non-Navajo teacher would have very beneficial effects on the children, the other members of staff and the Navajo community.

(b) *Navajo Culture*

Most participants felt that formal instruction in Navajo culture should form part of the preparation of both Navajo and non-Navajo teachers since the former would have the responsibility of teaching it, and the latter would need it for an understanding of the background of the children they taught. The conference was in general agreement that to be able to present his culture systematically and

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6. The relative position, title, and responsibility of the Navajo and non-Navajo teachers in actual kindergartens after training came up many times during the discussions and there was considerable vacillation as to who would fill what position. It was assumed that the person with greater responsibility (i.e., in general the Navajo teacher) would be the "teacher" and the one with less responsibility the "aide". (The possibility of having "resource interns" was also mentioned.) However, it was realized that there would be problems of relative amounts of previous education, professional training, civil service status and othter factors to be taken into account in each particular case. It was pointed out that there would be a certain amount of variation in pattern, and that staff in both categories might be members of the Navajo community. This report refers to people being trained for either category as "teachers" or "trainees".

*A self-instructional book on Navajo literacy is now being prepared by Oswald Werner and associates. It will be based on experience with **A Programmed Guide to Navajo Transcription** which was prepared for graduate students in anthropology by Kenneth Y. Begishe, Jeannette Frank and Oswald Werner at Tsegi Trading Post, Tonalea, Arizona, in 1967.

effectively, the Navajo teacher would need assistance because of his own concept of this culture might not necessarily be broad or deep enough. The conference was also agreed that it would be necessary to prepare materials systematically presenting Navajo culture (with accompanying tapes and video tapes), perhaps in the form of a handbook for teachers. It was suggested that such materials could be based on existing information and could be gathered from members of the Navajo community in various areas of the reservation.

It was also agreed that a bibliography listing sources of information on Navajo culture for both teachers and lay people would be useful. It was reported that at present there was an extensive Tribal Centennial Bibliography at the Navajo Tribal Museum at Window Rock. This bibliography, which at present contains thousands of entries, could form the basis for a list of materials specially selected for teachers which could include information on the availability of titles in paperback editions.

(c) *Language Orientation*

Although there was some division of opinion as to whether teachers should be given any instruction in the basic concepts of linguistics and their relation and application to problems of language use and language teaching, there was general agreement that both Navajo and non-Navajo teachers would benefit from a general language orientation course, with a carefully chosen minimum of theory supported by practice. It was suggested that a suitable model might be William Moulton's *A Linguistic Guide to Language Learning*[7] and that practical work could in part be based on a comparison of English and Navajo so designed as to give some understanding of the major interference problems from Navajo for Navajo learners of English, and from English for those trying to learn Navajo.

(d) *The Teaching of English to Navajo Children*

The conference was in agreement that the methodology of teaching English to speakers of Navajo at the kindergarten level should form an integral part of the training of the non-Navajo teacher. However, as noted above, there was considerable division of opinion as to how a second language should be taught at this early level. The conference in general was reluctant to recommend any one approach. It was realized that between the two extremes of a completely unstructed "play" approach and the very rigid approach that relies solely on structure drill and no other actvity there was a variety of possible approaches that could combine elements from both. However, some participants maintained that rather than compromise, those in charge of the training of BIA kindergarten teachers should develop several alternative approaches to the teaching of English to young speakers of Navajo. The use of several alternative approaches in the same training program was also suggested. It was realized that there would be problems of materials, personnel, and time, as well as finance for such a policy and it was suggested that the BIA make long-term plans for the development of flexible and alternative approaches to the teaching of English in the training of its kindergarten teachers.

The suggestion was also made that for the immediate needs of the next summer one or two people with training and experience in English as a second language with young children and an understanding of the structure of the Navajo language be called upon as resource persons to develop a short-term methodology course for use in next summer's training program. It was urged that the course be related both to the curriculum content for English recommended above and, where relevant, to the methodology used in the teaching of Navajo to the non-Navajo teacher.

(e) *Early Childhood Education*

There was full agreement that a course in the principles of early childhood education would be necessary both for the Navajo and non-Navajo teacher. In the presentation of such a course it was suggested that attention be given to child rearing practices among the Navajo.

The question that aroused most interest was whether this course should be offered in English, or in Navajo. It was assumed by most participants that some Navajo would be used in discussions of curriculum content and in connection with classroom procedures, but many thought it would be unrealistic to try to use Navajo in the presentation of the principles of early childhood education considering the lack of materials and personnel to do this effectively. Participants in favor of Navajo maintained that formal terminology offers no barrier to the consideration of child development programs

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7. William G. Moulton, **A Linguistic Guide to Language Learning**, New York: Modern Language Association of America, 1966.

could be presented in very simple terms, with no complex terminology. They held that the course would be more a question of eliciting than of formal instruction, and that it would be as easy to present it in Navajo as in English. It was also felt that expressing these concepts in Navajo would prepare teachers for answering questions of monolingual parents. This question of the use of Navajo in teacher training is discussed briefly in the section under staffing.

(f) *Practical Experience*

The conference recognized the necessity for practical experience for both Navajo and non-Navajo trainees. Such experience should include guided observation of both video-taped and actual classrooms, lesson planning and preparation and actual classroom teaching by trainees. Classroom teaching should be followed by careful analysis and evaluation of techniques and procedures used.

B. *Staffing the Training Program*

It was assumed that each of the first five components of the training program discussed above would need qualified and experienced professional people to offer the courses and supervise the practical work related to them.

The recommendation by some participants to use Navajo as a medium of instruction in the training of teachers raised some very difficult staffing problems. Although most participants agreed that such use would have many advantages, a number of them had grave misgivings about the practicability of it for next summer's training program. The lack of materials and of an extensive terminology for formal education were grave enough problems, but they also pointed out that it would be very difficult to find qualified professional Navajo-speaking people to be responsible for the various components of training, and even if such people were available, it would still mean a dual program, one in English for the non-Navajo speaking trainees and another in Navajo for the Navajo speakers. Indeed, some participants felt that attempting teacher preparation through the medium of a language in which there was as yet no established terminology or literature might still be premature and too ambitious, and noted that failure could prejudice the success of future bilingual education for American Indians in general.

Some aspects of the training program would, of necessity, involve the use of Navajo as pointed out in the discussions above on early childhood education. It was also suggested that if funds and qualified personnel were available, courses such as those on Navajo culture could be offered in two languages.

The conference suggested that the BIA make long-term plans for the preparation of Navajo professional personnel to conduct teacher training in their own language through providing opportunities for one or two years of professional training in kindergarten work to promising Navajos in institutions with recognized standing in this field. A consortium of universities which could maintain sustained interest in the area was suggested. It was also suggested that the new Community College on the reservation might in time develop into a teacher training institution.

The conference was in full agreement with the BIA representatives that whenever possible qualified and experienced Navajo personnel should be used for the various aspects of the training program.

A number of participants felt that parent involvement in the training program would be desirable, but that it had accompanying problems related to budget and planning their involvement. The advantage of such involvement, it was maintained, would be to give the children confidence in the school and to create a feeling of mutual respect and accomodation between parents and teachers. Though the conference was in general agreement that the ties between the home and the school life of the child should be kept close, no specific task was outlined for parents as part of the training program.

C. *Recruitment and Selection of Trainees*

The conference was in agreement that the Navajo community should be involved in selecting the teachers to be trained, especially the Navajo teachers. It was agreed that both the local chapter and the school board should be involved in the selection perhaps through participating in a local advisory board for each kindergarten. It was suggested that guidelines be drawn up to assist the community in teacher selection.

Criteria suggested for the selection of both Navajo and non-Navajo teachers for training included the following: the teacher should have a native or near native proficiency in the language in which he was expected to work; he should, if possible, have a B.A. in elementary education (but not to the exclusion of other fields) or the equivalent in teaching experience; he should like young children and have ability to communicate with them and members of the community in which he worked; he should be interested in curriculum development and curriculum reform.

It was realized that there might be problems in the recruitment of Navajo teachers for training since there was a shortage of suitable candidates to choose from. It was pointed out that there would be problems in choosing teachers from outside each community and that there would also be practical problems of civil service regulations which would have to be taken into account in the movement or dismissal of teachers. One source of recruitment suggested was teachers now employed in kindergartens of the Navajo Reservation.

For the recruitment of non-Navajo teachers it was suggested that graduate students from universities wih interests and involvement in the education of young children be considered. Other sources suggested were Peace Corps volunteers, the Teacher Corps and VISTA workers. It was suggested that the American Anthropological Association, the National Education Association, and departments of education at various universities be asked for help in locating suitable candidates.

The conference urged that the recruitment and selection of trainees take place well in advance of the summer.

D. *Follow-up to Training*

The conference was in agreement that follow-up on the six-week summer training would be necessary and that it would be important to have at least one workshop organized during the following year. December was suggested as a suitable time. More intensive, sustained, in-service training throughout the year was also recommended.

Specific Recommendations on Teacher Training

9. The conference recommends that the BIA sponsor the collection or the preparation of graded reading materials to be used in a Navajo literacy course for the preparation of teachers.

10. The conference recommends that the BIA sponsor the preparation of materials presenting Navajo culture in a systematic way for the use of kindergarten teacher trainees and those responsible for their training. It suggests that such materials have accompanying tapes and video tapes.

11. The conference recommends that the BIA sponsor the preparation of a bibliography on Navajo culture for the use of the teacher trainees and those responsible for their training. It suggests that such a project use the Navajo Tribal Centennial Bibliography as a basis which is regularly updated by the staff of the Tribal Museum.

12. The conference recommends that the BIA encourage experimentation in the methodology of second language teaching through the development and use of several approaches to the teaching of English in its kindergartens.

13. The conference recommends that the BIA immediately appoint one or two specalists with experience in English as a second language and an understanding of the structure of the Navajo language to develop a methodology course in the teaching of English to young Navajo children for use in the training program being planned for the summer of 1969.

14. The conference recommends that the BIA provide opportunities for long-term training in kindergarten work to promising Navajos at institutions with recognized standing in this field.

IV. IMPLEMENTATION OF RECOMMENDATIONS

The conference recommends that the BIA set up a schedule of activities for tasks that have to be accomplished in preparation for the 1969 summer program.

The tasks that need immediate attention are embodied in Specific Recommendations 1, 2, 4, 5, 6, 9, 10, and 13.

The conference recommends that the BIA decide, as soon as possible, which of these tasks can be accomplished by its own staff and which need consultant help, and take immediate steps to recruit and appoint consultants for those tasks that need assistance from specialists outside the BIA.

SECOND PLANNING CONFERENCE FOR A BILINGUAL KINDERGARTEN PROGRAM FOR NAVAJO CHILDREN

Conclusions and Recommendations

May 23-24, 1969

I. INTRODUCTION

On May 23-24, 1969 the Center for Applied Linguistics conducted the Second Planning Conference for a Bilingual Kindergarten Program for Navajo Children under contract with the Bureau of Indian Affairs (BIA). The purpose of the conference was to review developments in preparation for the kindergarten and teacher training programs, to refine the set of recommendations made at the initial conference held on October 11-12, 1968[1], and to make further recommendations for their implementation.

The meeting was held in Washington at the Center for Applied Linguistics. Participants included the following: Evelyn Bauer, Division of Curriculum Development and Review, BIA, Washington, D. C.; Bernarda Erwin, English for Speakers of Other Languages Program, Center for Applied Linguistics, Washington, D. C.; Wayne Holm, BIA, Rock Point Boarding School, Chinle, Arizona; Mariana Jessen, Division of Curriculum Development and Review, BIA; Vera P. John, Department of Educational Psychology and Guidance, Ferkauk Graduate School, Yeshiva University, New York, New York; Sirarpi Ohannessian, English for Speakers of Other Languages Program, Center for Applied Linguistics, Washington, D. C., Chairman; Dorothy A. Pedtke, English for Speakers of Other Languages Program, Center for Applied Linguistics, Washington, D. C.; Anita Pfeiffer, Rough Rock Demonstration School, Chinle, Arizona; Mary E. Ross, BIA, Navajo Area Office, Window Rock, Arizona; Muriel R. Saville, Department of English, Texas A&M University, College Station, Texas; Faralie S. Spell, BIA, Navajo Area Office, Window Rock, Arizona; Rudolph C. Troike, Department of English, University of Texas, Austin, Texas; Oswald Werner, Department of Anthropology, Northwestern University, Evanston, Illinois.

Plans for Teacher Training Programs for Navajo Kindergartens

During the academic year 1969-70 the BIA is planning to open 35 new kindergartens for American Indian children in addition to the 34 now in operation. Of the 35, it is expected that 14 will be for Navajo children. Present plans are to provide two training programs for teachers of all 35 kindergartens. The two training programs will take place simultaneously with some overlap in time, staff and training schedule.

The main training program will be organized for the majority of teachers and aides, including some Navajo teachers and aides. A special training program is being planned for a small group of Navajo teachers and aides. This program will provide intensive training in a bilingual-bicultural approach with special emphasis on the Navajo language and its use as a medium of instruction at the kindergarten level, as well as for the teaching of English to Navajo-speaking children. It is hoped that it will be possible to provide training to teachers and aides of *six* such bilingual-bicultural kindergartens (3 from among the 35 new kindergartens, plus 3 from among the original 34). The May 23-24 conference was mainly concerned with preparation for this bilingual-bicultural training program for Navajos.

The Agenda of the May 23-24 Conference

The meeting reviewed the recommendations of the October 1968 conference[2]; heard descriptions of

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1. See **Planning Conference for a Bilingual Kindergarten Program for Navajo Children, Conclusions and Recommendations, October 11-12, 1968.** Washington, D. C.: Center for Applied Linguistics, 1969.
2. **Ibid.** pp. 3-16.

the training program scheduled for the summer of 1969, and of such aspects of the recommendations of the October 1968 conference as had been or were in the process of being implemented; and made further resolutions and recommendations.

The first part of the conference was devoted to a preliminary but detailed review and discussion of the recommendations of the October 1968 conference. Each of the recommendations was examined in the light of new developments and present circumstances and discussed at length, with suggestions for its endorsement, refinement, or restatement. Reports on projects that had resulted from the implementation of some of the recommendations were heard in the afternoon.

The afternoon session began with a review of preparations for the two training programs. Mariana Jessen reported on plans for the main training program, going into some detail on schedule, staffing, and location[3]. She also reported on the workshops that had been held in January (Phoenix, Arizona) and April (Albuquerque, New Mexico) as follow-up to the training program of last summer.

Mary E. Ross and Faralie S. Spell reported on plans for the special bilingual-bicultural training program. They outlined the schedule of training and indicated the personnel to be responsible for each part of the training program[4].

The conference then heard reports on projects implementing those of the recommendations of the October 1968 conference on which the BIA had taken formal action. The first report was by Muriel Saville who under a CAL contract with the BIA is preparing a curriculum guide for teaching English to Navajo kindergarten children. The next report was by Mrs. Spell, who reported on the preparation of a Navajo curriculum guide for the kindergarten level, by Dr. Saville under a contract between the BIA and Texas A&M University. Oswald Werner then gave a brief summary of the recommendations of the conference held in Albuquerque on May 2-3 on an orthography for the Navajo language[5]. Other action that had been taken on various recommendations was reported on informally during the discussions.

The remainder of the time was devoted to general discussion of various aspects of the pilot kindergarten project. A number of imaginative and practical suggestions were brought forth and an attempt was made to work them out in as much practical detail as possible. Throughout the discussion representatives of the BIA, especially the Navajo Area Office, emphasized their appreciation of all suggestions and their desire to be able to take further recommendations back to the field.

Brief accounts of the reports and discussions are given in the next section.

II. RESOLUTIONS AND RECOMMENDATIONS

The conference was gratified by the efforts that had been made to implement the recommendations of the October 1968 conference, and commended the BIA for action it has taken on a number of them. The conference was also gratified to hear that the Report of that conference had been consulted by personnel at the Navajo Area Office in the preparations for the special kindergarten program. It was the general feeling of the conference that an earlier start on the implementation of the recommendations would have accomplished even more than had been achieved at present. In this regard the conference strongly voiced the plea that appropriations for educational projects by Congress be made as early as possible to make effective planning for them feasible.

1. *Resolutions and Recommendations Concerning Those of the October* 1968 *Planning Conference.*

As has been indicated the resolutions and recommendations of the present conference were largely based on those of the initial planning conference held in October 1968. The following section will take each of the recommendations of that conference separately, give a brief summary of reports on any action taken and of related discussion, and give the conclusion arrived at.

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3. For details see Appendix I of the present report.
4. For details see Appendix II.
5. See **Conference on Navajo Orthography, Albuquerque, New Mexico, May 2-3,** 1969, Washington, D. C.: Center for Applied Linguistics, 1969.

Recommendation 1

The conference recommends that the BIA sponsor a community-wide survey of the attitudes of Navajo parents and community leaders towards goals and needs in the education of their children in general, and towards the concept of bilingual education in particular, especially at the kindergarten level.

It was reported by the representatives of the Navajo Area Office that an informal survey of the attitudes of parents towards bilingual kindergartens had been conducted on the reservation. However, the survey had not been uniform in nature, and a variety of individuals and methods had been used in the collection of information. A compilation of information was in progress. The Area Office had plans to carry out a more thorough survey. It was negotiating a contract with the University of New Mexico to this effect[6].

The conference endorsed the idea of a more thorough and systematic survey, but suggested that a limited, preliminary survey carried out in the summer of 1969 would still be very useful. It was therefore recommended that a few furloughed teachers and other BIA personnel be used to carry out a limited survey in three different but typical communities during the summer of 1969. It was suggested that these communities be (a) a community in a peripheral area, (b) a conservative community on the reservation and (c) a community that had had some exposure to bilingual instruction, such as the Rough Rock community. It was suggested that parents with kindergarten age children be the main target group in this survey.

Oswald Werner and Wayne Holm were asked to prepare a short questionnaire for use in the survey based on a questionnaire developed by Joshua Fishman for a bilingual study of the New York Barrio[7]. It was suggested that the questions be phrased so that simple and clear answers would make feasible the easiest possible collection and analysis of data, and that the questionnaire be translated into Navajo for uniform use by survey workers.

It was also suggested that a filmstrip, based on activities of this summer's training program, and giving information on bilingual education, be prepared for use by the people conducting the survey, since it was not easy to explain to Navajo parents what was meant by it exactly. It was agreed that the Navajo Area Office would be responsible for the organization of the Summer 1969 survey.

Recommendation 2

The conference recommends that information on the purpose and nature of bilingual kindergartens now being planned for the Navajo community be widely disseminated among the Indian community through (a) a series of three articles commissioned by the BIA to appear in Navajo newspapers; (b) the use of Navajo radio; and (c) addresses by Navajo professionals to chapter meetings.

Information was received from the BIA Central Office shortly before the meeting that only one article had been prepared to date, and that was being cleared for publication.

The Navajo Area Office was preparing one article. There had been radio programs at Holbrook, Winslow, Flagstaff and Gallup. The Area Office had spoken to the Tribal Council, Agency offices and school boards concerning bilingual kindergartens.

The conference recommended that efforts be continued on the dissemination of information on bilingual kindergartens.

Recommendation 3

The conference recommends that if it is not already being done, the BIA sponsor a

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6. A far broader assessment of Navajo thinking on the role of language in Navajo education as well as literacy for Navajos was suggested. See section on **New Recommendations** for proposed meeting of Navajos for this purpose.

7. Joshua A. Fishman, Robert L. Cooper, Roxana Ma, et al, **Bilingualism in the Barrio (The Measurement and Description of Language Dominance** in Bilinguals), U. S. Office of Education Research Contract, Final Report, August 1968, Appendix VIII-2, Instruments and code sheets, pp. 1048-1209.

project for the collection of information on the international programs for bilingual education at kindergarten and early school levels in countries where a situation similar to that of American Indians obtains.

After some discussion of projects presently collecting information on bilingual education such as those being carried out by Yeshiva University under the direction of Vera John and by Theodore Andersson and Mildred Boyer under a contract with the Southwest Educational Development Laboratory, the conference reiterated *Recommendation* 3 with the same condition.

Recommendation 4

Since written material in Navajo will be necessary both for purposes of curriculum development and teacher training, the conference recommends that the BIA appoint a small committee of linguists and qualified Indian educators to agree on an orthography that may be adopted for use in the BIA educational system. The conference suggests that existing scripts in which a sizeable amount of literature exists be considered for adoption or adaptation.

Recommendation 4 had been implemented through the BIA's commissioning the Center for Applied Linguistics to convene a conference to decide on an orthography for Navajo. The conference had been held in Albuquerque on May 2-3, 1969. Intended uses and desirable characteristics of an orthography had been discussed, and an orthography to meet these requirements had been agreed on. A report of the meeting was expected to be completed by June of 1969.

Recommendation 5

The conference recommends that as a first step towards the development of a curriculum in which the Navajo language will be the medium of instruction at the kindergarten level the BIA appoint a Navajo Curriculum Committee with representation from the Tribal Education Committee and including specialists in linguistics, Indian culture, and early childhood education to guide the development of such curriculum and eventually the preparation of materials in Navajo.

The specific tasks of the Committee would be to appoint a number of sub-committees to work on the following areas and to guide their work:

(a) The drawing up of a list of terms and technical vocabulary that may be needed for use in the various areas of the curriculum, and to agree on the adoption of various terms.

(b) The development of curriculum content in the several areas of kindergarten work. The conference urges that the work be based on the linguistic and cultural background of the child and be carried out on the lines suggested in the discussions above.

(c) The development of materials for each area of the curriculum for the use of the teacher, with accompanying suggestions on techniques of classroom presentation and where necessary, tapes and video tapes.

The Navajo Area Office has commissioned Texas A&M University to prepare a Navajo curriculum guide for the kindergarten level for the academic year 1969-70. The work will be carried out by Muriel Saville, assisted by a Navajo teacher who will spend the academic year 1969-70 at Texas A&M University. Areas Dr. Saville hopes to cover in the curriculum will be: (a) communication, i.e., Navajo language; (b) geography, i.e., environment concepts, family, etc.; (c) abstract concept development, i.e., shapes, numbers, leading to pre-reading; (d) art, music, physical activities, and non-verbal expression. Work on the curriculum will begin in July 1969.

The conference was gratified that action had been taken on the preparation of a curriculum for kindergarten work through the medium of Navajo and was very pleased that material would be available for use in bilingual-bicultural kindergartens during academic year 1969-70.

The conference, however, reiterated the conviction of the October 1968 conference that bilingual

education, to be effective, should be continued into the first three grades. It therefore urged that an integrated, sequential Navajo curriculum be prepared for kindergarten through grade 3 and that eventually classroom materials for all these levels also be prepared.

In order to ensure continuity in the development of such an integrated curriculum and materials development program, the conference strongly reiterated its previous recommendation that a Navajo Curriculum Committee be established with the tasks outlined in *Recommendation* 5.

It was suggested that the development of the Navajo curriculum and Navajo materials be carried out under the auspices of the Navajo Area Office. It was urged that immediate action be taken for the setting up of a Navajo Curriculum Committee and of the necessary machinery to enable the project to get an early start.

Further recommendations related to the development of a Navajo curriculum included the following:

(a) It was recommended that all work related to the development of an integrated Navajo curriculum be closely coordinated through the services of a central, neutral, outside agency such as the Center for Applied Linguistics. Aspects of such coordination would include acting as secretariat to the Navajo Curriculum Committee; coordinating the work of the teams or sub-committees; working on various aspects of the curriculum; being responsible for the hiring of personnel; visiting sites; seeing that deadlines are met; preparing progress reports, and other stated functions.

Summer workshops for teachers and others working on materials development were suggested. It was felt that teachers from Rough Rock Demonstration School, the Navajo Community College, and other institutions with experience in the teaching of Navajo should be involved in the project and that they should be given time off for this purpose.

(b) It was recommended that a permanent Navajo Curriculum Center be established to act as a repository and clearinghouse on all materials on the Navajo language and culture, on research and other experimental work related to the teaching of Navajo and through the medium of Navajo. Such a repository would house materials developed under a large variety of auspices and serve the entire community. The location of such a repository was discussed at length. It was agreed that it should be located in the Southwest. Suggested places included: the Navajo Community College; the BIA center for materials at Brigham City; the Albuquerque office of the BIA; and the Navajo Tribal Museum at Window Rock.

Recommendation 6

> The conference recommends that the BIA take immediate steps towards the development of an English curriculum embodying a list of structures and vocabulary items of the language that should be covered in the first year of oral English for the Navajo kindergarten child. The conference believes that preparation of actual materials for oral English based on the specific problems of Navajo children, with suggestions for classroom activity to the teacher, would be of immense help to the kindergarten program. It suggests that such preparation be undertaken as soon as possible.

The Washington office of the BIA has commissioned the Center for Applied Linguistics to prepare an English curriculum as described above. The work is being carried out by Muriel Saville, in the form of an outline guide. The guide will consist of a list of structures and vocabulary to be taught, accompanied by some illustrative exercises and sample lessions. The approach is intended to be innovative and experimental in some aspects and the guide will not be used outside of the pilot program in these early stages.

Dr. Saville described briefly some of the problems related to the preparation of the curriculum guide. They were concerned with English-Navajo contrastive semantics; extralinguistic factors such as beliefs and attitudes; and problems of categorization of experience. There were also problems related to the methodology of presenting the materials, especially to questions of sequencing and introducing the various grammatical categories of English, for instance, whether to introduce nouns before verbs. Dr. Saville said that she was using Navajo structure as a point of departure in sequencing the materials, and was exploring areas of interest for Navajo children to base the content of materials on.

Some of the discussion related to *Recommendation* 6 emphasized a study of actual interference problems in the spoken and written English of Navajo students, to compare with the theoretical predictions of contrastive linguistic analysis.

The problem of who was to handle the English component of the kindergarten curriculum was discussed at great length. It was agreed that both teacher and aide could be Navajos in a bilingual kindergarten. It was felt, however, that a native speaker of English, or a Navajo with a native command of English, should teach the English component.

Various suggestions were made as to how this might be possible with the present lack of completely qualified personnel. It was suggested that if the school had a trained ESL teacher, that person might come in for the English teaching period. Similarly, intern teachers might teach English under supervision. Representatives from the Navajo Area Office agreed to look into these possibilities.

It was further remarked that it would be a good idea to screen in some way the language facility of all teachers in both Navajo and English. Native speakers as well as non-native speakers had been heard to teach erroneous patterns, and this was something especially to be avoided in this pilot program.

It was also urged that in the teaching of English and Navajo (and when these languages were being used as vehicles of instruction) as far as possible they be kept separate so that teaching proceeded either in one language or the other, but not in a mixture of the two. However, occassional explanations in the mother tongue were not ruled out of the English classes.

Recommendation 7

> The conference recommends that the BIA sponsor a long-term research and experimentation project on the problem of second language acquisition at the early childhood level. Since such research is of vital importance for all bilingual projects in the country, the conference suggests that funds be sought from other government agencies and departments such as the Office of Education, the Office of Economic Opportunity, as well as private sources such as foundations.

The Washington office of the BIA is considering funding a proposal by the University of New Mexico to study the effects of beginning reading in the native language (Navajo) versus beginning it in a second language (English). This is expected to be a three-year research project.

It was also reported that interest in conducting research on second language acquisition in young children had been expressed by Dr. Daniel Dato of Georgetown University and it was being given consideration by the BIA Washington office.

The conference strongly reiterated its belief in the importance of research in all aspects of second language acquisition, and urged that every effort be made to carry out such research not only at the early childhood level but at the elementary school level as well.

It was pointed out that such research need not necessarily be on a large scale or need a great deal of expenditure. The conference suggested that the BIA make grants available to graduate students in universities with recognized programs in psycholinguistics or faculty members with interest and standing in this field. Some possible institutions mentioned were the University of California at Berkeley, Harvard University, the University of New Mexico, Stanford University, the University of Texas at Austin, the University of Utah, and Yeshiva University. It was also suggested that the BIA consult the *Annex* to the report on *Styles of Learning American Indians: An Outline for Research* which devotes a great deal of attention to planning such research. The *Annex* to the report has a list of institutions and individuals which would have the competence to carry out such research and might be interested in it.

Recommendation 8

> The conference recommends that the findings of research carried out so far on second language acquisition by pre-school children be collected and presented in non-technical language for the use of teachers.

The conference wished to reiterate *Recommendation* 8 very strongly. The dearth of information on second language acquisition, it was stated, made it imperative to make available to teachers and administrators any existing research on any aspect of the field. It was also suggested that some of these reports be translated into Navajo.

Recommendation 9

> The conference recommends that the BIA sponsor the collection of the preparation of graded reading materials to be used in a Navajo literacy course for the preparation of teachers.

No action was reported on this recommendation except that some existing materials would be used in next summer's training program.

The conference reiterated its conviction that specially graded materials directly aimed at problems of reading Navajo should be prepared for use in teacher training programs. It was further noted that it would be good to produce general reading materials of interest to Navajos, both adults and children.

It was suggested that the recommendation of the conference on Navajo orthography be consulted in the preparation of such materials, and that preferably they be produced in non-permanent form until such time as a standard Navajo language and spelling system developed.

Recommendation 10

> The conference recommends that the BIA sponsor the preparation of materials presenting Navajo culture in a systematic way for the use of kindergarten teacher trainees and those responsible for their training. It suggests that such materials have accompanying tapes and video tapes.

(It was suggested that "aspects of Navajo culture" replace "Navajo culture" in this recommendation.)

There was considerable discussion on the teaching of Navajo culture and mythology. The general consensus was that *Recommendation* 10 should be reaffirmed and the need for materials pointed out again. It was suggested that Navajo consultants be used in the preparation of materials related to Navajo culture and that the Navajo language be used in materials related to Navajo mythology.

It was reported that an information kit on aspects of Navajo culture had been prepared by Dr. Alan Kite, including visual aids, and is available in a traveling van. It was suggested that this material be made use of in the training program but that explanations be given in Navajo rather than in English.

Recommendation 11

> The conference recommends that the BIA sponsor the preparation of a bibliography on Navajo culture for the use of the teacher trainees and those responsible for their training. It suggests that such a project use the Navajo Tribal Centennial Bibliography as a basis which is regularly updated by the staff of the Tribal Museum.

This recommendation was simply reiterated.

Recommendation 12

> The conference recommends that the BIA encourage experimentation in the methodology of second language teaching through the development and use of several approaches to the teaching of English in its kindergartens.

The conference maintained its recommendation that experimentation in the teaching of English to Navajos at the kindergarten level be continued and that several approaches be developed.

It was suggested that those in charge of curriculum development in the teaching of English as a second language in both the general kindergarten and the special bilingual-bicultural project write brief rationales of the methods they advocated in the classroom presentation of the curriculum material.

Recommendation 13

The conference recommends that the BIA immediately appoint one or two specialists with experience in English as a second language and an understanding of the structure of the Navajo language to develop a methodology course in the teaching of English to young Navajo children for use in the training program being planned for the summer of 1969.

The conference reaffirmed *Recommendation* 13, and strongly stressed the need for an understanding of the structure of the Navajo language on the part of those responsible for the methodology of English teaching, and an awareness of the crucial role of contrastive linguistics and cultural analysis in helping understand and overcome errors observed in students.

Recommendation 14

The conference recommends that the BIA provide opportunities for long-term training in kindergarten work to promising Navajos at institutions with recognized standing in this field.

The conference pointed out that the critical task in the next few years was the preparation of personnel for bilingual programs in Navajo education. It again strongly recommended that the BIA provide opportunities for long-term training for Navajos in institutions with recognized status in disciplines related to the bilingual and bicultural education of young children. Institutions mentioned were Vassar College, Harvard University, Peabody College, Bank Street College of Education, the University of Illinois, and Stanford University.

The question of internship in BIA schools for university students majoring in relevant fields was discussed at some length. It was suggested that the BIA make grants to such students for internship in its schools, and that it apply for EPDA grants for its own personnel to study in appropriate institutions.

III. NEW RECOMMENDATIONS

1. One area to which the conference returned again and again was that of involving Navajos in making their own decisions about the linguistic, cultural and other aspects of the education of their young children.

The conference felt that it would be extremely helpful to make it possible for a representative group of Navajos, drawn primarily from local chapter school boards or education committees, to come together for a problem-centered meeting concerning educational policy. The immediate purpose of the meeting would be to consider the role of the Navajo language in the education of their children, literacy in Navajo both for children and adults, and the manner in which the wishes of the community could be implemented.

The conference therefore strongly recommended that the Navajo Tribal Education Committee approach the Ford Foundation for funds for the organization of such a conference.

It was suggested that members of the Tribal Education Committee, of school boards, of local chapters and so on be asked to visit the bilingual projects during the course of the academic year in order to make them more prepared to discuss the implications of bilingual education.

2. The fact that there is not a standard Navajo language, a standard spelling system, or a developed vocabulary for various areas of the curriculum is closely related to the lack of information on the present state of the Navajo language.

The conference recommended that a dialect survey of the Navajo speech community be made in order that decisions on curriculum development for various subject areas, as well as on the broader

uses of the Navajo language in the education of its speakers, and the social and cultural life of the Navajo people, may be made intelligently[8]. Specifically, the dialect survey would have important implications for such problems as choosing lexical and pronunciation variants to be represented in introductory reading materials.

The following conference reporting the deliberations of educators and linguists concerned with the use of the Navajo language in a school setting is indicative of the unusual problems encountered in bilingual education for American Indian children. American Indian languages historically were not written and, hence, are in the process of developing acceptable orthographies and literatures. Questions concerning conventions in writing that other literate languages probably passed through at one time or another are being encountered now in such languages as Navajo. Recent experience with bilingual education programs using a tribal language and English have continued to reflect unexpected orthography problems. Conferences such as this one, which was recommended by the Center for Applied Linguistics' Planning Conference for A Bilingual Kindergarten, should be accepted as a part of the developmental stage of bilingual education for American Indian languages. It has been found that few linguists or educators like to assume full responsibility for determining how certain problem features of a language should be handled in the orthography. The shared responsibility represented in the conference is very important and should be noted by educators and linguists alike.

8. Dr. Muriel Saville indicates that she plans to seek a grant to begin such a survey in the summer of 1970.

BOOKS ON BILINGUALISM

Harry B. Berendzen

A. Abstracts of Key Books and Articles

Andersson, Theodore, and Mildred Boyer, *Bilingual Schooling in the United States.* Southwest Educational Development Laboratory, 1970.

This two-volume monograph on bilingualism, a "major, virtually untapped national resource," is based on three extensive field trips to current bilingual programs: (1) in the Northwest as far north as Barrow, Alaska; (2) the Southwest and Hawaii; and (3) from Dade County, Florida, north through Washington, New York, New England, and into Canada. In addition, almost all the bilingual programs in Texas were visited. This study presents a history of bilingual schooling, both in the United States and in other parts of the world; alternative concepts of bilingual schooling; sample curriculum models; implications for education and society; and an outline of needs, as related to action and research. Vol. I includes an 870-page annotated bibliography with index, and an index of terms. Vol. II contains appended data on the Bilingual Education Act (Title VII); draft guidelines to the Bilingual Education Program (since revised by the Office of Education); demographic data; notes on immigration legislation; a typology of bilingual education (included among these abstracts); socio-historical notes on bilingualism in the United States; descriptions of non-English speaking ethnic groups in the United States; a directory of persons, organizations, and sources of teaching materials; names and addresses of USOE Bilingual Design Project Advisory Committee members; and a list of invited guests at the Conference on Bilingual Schooling in Northlake, Illinois. Although many of the details regarding bilingual programs are already outdated and the chapter on American Indians is cursory and overly pessimistic, this work is still the broadest review to date. It may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402 ($6.00 per set of 2 vols., sold in sets only).

Barkman, L. Bruce, "Some Psychological Perspectives on Bilingualism and Second Language Teaching," *McGill Journal of Education,* Vol. 4, No. 1, (Spring, 1969), 11 pp.

Selected for discussion in this paper are some investigations which have results relevant to second-language teaching, insofar as they might affect the learners, the teachers, and the materials used. These psychologically-oriented studies of bilingual communities deal with (1) bilingualism and intelligence, (2) language aptitude, (3) motivation, (4) bilingual skill levels, (5) stages of bilingual development, and (6) compound and coordinate models of bilingualism. The author hopes that educators, psychologists, and linguists will be able to use together the insights they have gained separately toward the development of more effective second-language programs. They will then be communicating not only among themselves, but the results of their labors will eventually open the avenues of communication between the two major language and culture groups in Canada.

Carton, Aaron Suss, *Extending the Psychological Theory and Educational Possibilities of Programmed Language Instruction.* Pre-publication paper presented at the Kentucky Foreign Language Conference, Lexington, Kentucky, 1965, 16 pp. (ERIC No. ED 030 097).

The author objects to criticism of current programmed language instruction (PLI) materials. In a "conventional FL (foreign language) class" of 120 class hours a year, the amount of time spent in active, immediately reinforced responding by any individual student would be less than 100 minutes. This is in contrast to the shortest PLI program (53 class hours a year), in which a student spends at least 40 percent of his time responding. The implication is that the intensive controlled responding that characterizes PLI (and many other methods of FL instruction) may be quite effective, but that it is not merely as effective as other processes of learning." The most relevant and effective processes may be under the student's rather than the pedagogue's control. The author examines the relevance of transformationalism to FL pedagogy and the various possibilities of using such language learning mechanisms as "intentional imitation," "shadowing," and "feedback." In discussing how programming can develop various skills for further learning,

he points out that developing "self-critical skill" can serve in the future acquisition of phonology, and "interfering" can aid in acquiring new vocabulary. Branched, rather than linear, programming implies an acceptance of individual differences among students. Programmers should study artists' control of audience responses.

Finocchiaro, Mary, *Bringing the School and Community Together*, Paper given at the 3rd Annual TESOL Convention, Chicago, Illinois, 1969, (ERIC No. ED 028 419).

The importance cooperative relationship between the school and its community assumes even greater importance when the learners are speakers of other languages. The single most important motivating force in learning a new language is the attitude of learners and their parents toward the new language and its speakers. Of all the responsibilities the schools have toward parents and the community, five have top priority: (1) developing a large number of truly bilingual teachers; (2) preparing bilingual teachers' aides; (3) establishing improved channels of communication between school and community; (4) developing mutually accepting relationships between English speakers and speakers of a second language; and (5) orienting teachers, supervisors, and curriculum writers in realistic attitudes toward their learners and their problems. Discussed are suggestions for possible school-community activities and techniques already adapted by some schools. The author stresses the importance of fostering positive attitudes on the part of school personnel toward non-English speaking parents. All the factors within the community - the language spoken by the majority of its members, and the socioeconomic and literacy levels - should be considered by the teacher and administrator.

Jessen, Mariana, ed., *A Kindergarten Curriculum Guide for Indian Children: A Bilingual-Bicultural Approach.* U. S. Bureau of Indian Affairs, Washington, D. C., 20242, 1970, 145 pp.

A bilingual and bicultural approach is presented for teaching Indian students by enhancing and utilizing the familiar while broadening and enriching the students' experiences related to the larger American culture. Information is given on the significance of early learning, physical and mental aspects of the five-year-old, articulation of early childhood experiences, and the role of the staff in early education. Curriculum experiences are outlined for language and concept development, social living, mathematics, music, natural and physical concepts, health and safety, foods, and aesthetic appreciation. The importance of the supportive services and parental and community involvement in the kindergarten program are also emphasized. The appendices and bibliography include enrichment materials, guidelines for space utilization, and equipment requirements, and examples of forms and materials.

Kelley, Louis G., ed., *Description and Measurement of Bilingualism/Description et Mesure du Bilinguisme.* Canadian Commission for UNESCO, University of Toronto Press, 1967, 159 pp.

This volume is essentially a report of an international seminar on bilingualism which was held in June, 1967, at the University of Moncton in Canada, sponsored jointly by that university and the Canadian National Commission for UNESCO. Invited were linguists, psychologists, and sociologists from many countries, including, in addition to United States and Canadian scholars, distinguished researchers from Belgium, Japan, France, Wales, Switzerland, India, Germany, England, Eire, South Africa, the Netherlands, Finland, USSR, and Australia. Each of the six chapters represents a session of the seminar, with papers, commentaries, discussion, chairman's summary, and selected bibliography. Some of the material, as the title suggests, is given in both French and English versions. The volume concludes with a set of resolutions and a summary statement by W. F. Mackey. Those who read the material in this report will find in it a welcome reminder that bilingualism is not a local but an international concern, and that we would do well to take advantage of the experience of others often much more extensive than our own, in planning new bilingual programs. This report is the most worldwide review of interdisciplinary problems and progress in research on bilingualism.

Kinkade, M. Dale, "Roster of Linguists Studying North American Indian Languages," *International Journal of American Linguistics*, Vol. 37, No. 2 (April, 1971), pp. 114-121.

"If anyone wants information on a particular (Indian) language," says Kinkade in the introduction to his roster, "he may be unable to get it because he does not know who has done work on that language." Since much valuable linguistic information lies in the files of researchers awaiting publication or further development, it has been for the most part unavailable. For this

reason, Dale Kinkade of the University of Kansas has compiled a list of scholars who are doing work on North American Indian Languages. The list is by the author's admission neither complete nor fully accurate due to many rapidly changing variables beyond his control. On the other hand it is the only such roster in existence and is a very valuable source of information for anyone interested in Indian languages, especially those on which very little can be found in published sources.

Liedtke, W. W., and L. D. Nelson, *Bilingualism and Conservation*, 1968, 8 pp. Order from ERIC Clearinghouse, Center for Applied Linguistics, 1717 Massachusetts Avenue, N. W., Washington D. C., 20036.

In a study conducted at the University of Alberta, an attempt was made to use Piagetian-type observations as an assessment of intellectual capacities and to determine whether learning a second language at an early age has beneficial or detrimental effects on cognitive functioning. For this purpose an 18-question test dealing with conservation (awareness of invariance) and measurement of length was constructed. The six subtests and the questions used were similar to the tests used by Piaget and dealt with the following topics: reconstructing relations of distance. conservation of length, conservation of length with change and position, conservation of length with distortion of shape, measurement of length, and subdividing a straight line. According to Piaget the concepts represented by these subtests are dependent on each other and are acquired in a definite sequence. Fifty monolingual children in the first grade and fifty bilingual first-graders were tested individually. The mean for the bilingual sample on the conservation test was significantly higher than the mean for the monolingual sample. The result here seems to be in agreement with Peal and Lambert's finding that bilingualism has favorable effects on intellectual functioning.

Mackey, William F., "A Typology of Bilingual Education," in Theodore Andersson and Mildred Boyer, *Bilingual Schooling in the United States* (cited above).

This paper was originally prepared for a Research Conference on Bilingual Education held in June, 1969, under the auspices of the U. S. Office of Education. Dr. Mackey, director of the International Center for Research on Bilingualism in Quebec, develops a typology or system of classification for every type of program that could be called bilingual schooling. This classification is essential for any meaningful planning and measurement of bilingual education. Mackey bases his typology on language use in various contexts. He also takes language status into account. One of his main concerns is the identification of language patterns specifying the role of each language in school and the relation of each to the dominant language used in the home. He also treats the question of dialect variation within a language, a question of considerable importance in the development of Indian language programs. The "distance" between languages is also treated because of its importance in determining the cultural and conceptual gap that must be bridged in a bilingual program. Mackey's typology takes the major variables into account and applies appropriate measures to them. This makes it a valuable tool for educators involved with bilingual education.

Modiano, Nancy, "Reading Comprehension in Bilingual Programs," *The Center Forum*, Vol. 4, No. 1, September, 1969.

Nancy Modiano's study of reading comprehension in Mexico was among the first careful investigations of the consequences of introducing reading in the mother tongue. She compares the reading comprehension in Spanish of Indian children who had attended a bilingual school with that of Indian children who had attended all-Spanish schools. The test scores showed that the children from the bilingual schools, where they had first been taught to read in the vernacular, ranked significantly higher in their comprehension of written Spanish than the children in schools where reading had been introduced in the national language. Dr. Modiano attributes the difference to three factors: (1) the nature of the reading act; (2) attitudes toward reading in a second language; (3) teachers' ability to communicate meaningfully with their students. Dr. Modiano's research clearly supports the assumption long maintained by many linguists that reading is most efficiently introduced through the dominant language of the child. It also carries "strong implications for staffing" experimental minority group programs on the elementary level. Apparently for a reading teacher mastery of the new language is secondary to a thorough and sympathetic understanding of the local culture.

Ohannessian, Sirarpi, ed., *English for American Indians: A Newsletter of the Office of the Assistant Commissioner for Education,* Bureau of Indian Affairs, Washington, D. C., 20242, 1969, 40 pp.

This second newsletter publication of the Bureau of Indian Affairs follows the format of the first issue. The first article, "Language Drill and Young Children," is by Muriel Saville of Texas A & M University. The author's experience has convinced her that in a classroom situation a language is not caught by mere exposure, but requires a sequential and systematic presentation of structural elements for maximum effectiveness and efficiency with students of all ages. When provisions are made for different interest levels and attention spans, language "drill" is compatible with the more informal curriculum of early childhood education. Illustrated are various types of language activities, developed specifically for teaching the contrastive sounds of English to children in kindergarten, beginner, or first grade classrooms. Carol J. Kreidler's "Teacher's Bookshelf" lists and describes selected supplementary materials for the teacher's reference, for the classroom, and for adult education work. Ruth E. Wineberg's "Information Exchange" is devoted to descriptions of new developments in BIA schools, projects and activities of particular interest to educators of American Indians, and professional meetings, institutes, and fellowships in the fields of English for speakers of other languages and bilingual education.

Olstad, Charles, ed., *Bilingual Education in Three Cultures. Annual Conference of the Southwest Council for Bilingual Education,* 1968, 32 pp. Order from: Publications Manager, Dept. of Modern Languages, New Mexico State University, Las Cruces, New Mexico, 88001.

These reports deal with the American English, Texan Spanish and Navajo languages and cultures. "English in Bilingual Education" by Elizabeth Ott describes the history of education in the Southwest and examines the concept and many forms of bilingualism. An example of a possible bilingual instructional program is given. "Tense, Mode and Aspect in Navajo" by Irvy W. Goossen is an overview of some of the problems met with in comparing the tenses of English with the modes of Navajo. "Interpretations of Anglo American Culture" by Chester Christian stresses the practical American efficiency responsible for a high standard of living and a bureaucracy and lack of respect for human values. It suggests that the Anglos' impatience with different cultures may be the cause for their unpopularity with other cultures.

Pfeiffer, Anita, *The Role of TESOL in Bilingual Education for the Navajo Child,* 1969, 9 pp. (ERIC No. Ed 028 447).

In American Indian and Spanish American populations, many schools ignore the first language and culture of their students and teach English as a second language in a "hit and miss" manner. Bringing some order out of this chaos has been one of TESOL'S most significant contributions. The author feels, however, that there is no substance to teaching English to speakers of other languages in and of itself. It has value only as a means of helping the child communicate in a different medium. In 1967, a case study was made which focussed on a Kwakiutl Indian considered particularly well adapted and bicultural. The summary of the study showed that an individual could make one of five choices in dealing with another culture. He could (1) completely reject the new culture; (2) completely reject his own culture; (3) reject both cultures and start a new one, e.g. the Peyote religious sect; (4) remain suspended between the two cultural systems, escaping through excessive drinking with a high degree of anxiety; or (5) participate in two or more cultural systems, moving back and forth between them. The author describes herself as a person having made the fifth choice. She discusses the bilingual, bicultural program for Navajo children at Rough Rock Demonstration School in Chinle, Arizona.

Saville, Muriel R., *Curriculum Guide for Teachers of English in Kindergartens for Navajo Children.* Division of Curriculum Development and Review, Bureau of Indian Affairs, Washington, D. C., 1969, 58 pp.

In September, 1969, the Bureau of Indian Affairs instituted a bilingual-bicultural program on the Navajo Reservation. A major aim of the program is to develop and implement a curriculum in which Navajo is the primary medium of instruction and English is taught as a second language. While the teaching of English is only one part of the total kindergarten curriculum, it is a part upon which future school achievement and social mobility largely depend. This preliminary guide outlines the distinctive sounds of English which need to be mastered, the basic sentence patterns of the language, and a vocabulary sufficient for classroom procedures and beginning reading texts. The content and ordering of the language lessons are based on a contras-

tive analysis of Navajo and English, which allows the prediction and description of problems the speakers of one will have in learning the other. This curriculum outline will be the basis of forthcoming teaching materials being prepared by the author.

Saville, Muriel R., and Rudolph C. Troike, *A Handbook of Bilingual Education.* ERIC Clearinghouse, Center for Applied Linguistics, 1717 Massachusetts Avenue, N. W., Washington, D. C., 20036.

This document was commissioned by the Center for Applied Linguistics to answer some of the questions of educators who are becoming involved with bilingual programs for the first time. The authors warn that some of the contents may be revised as experience mounts. Despite the warning, the authors answer many of the perplexing problems that have "immediate relevance to teaching." The study gives the rationale for a bilingual program, defines terms, discusses fundamental considerations including linguistic. psychological, and socio-cultural values. Included is a chapter on program design with various models to choose from. The language of instruction is treated with its phonological, grammatical, and lexical factors using Navajo and Spanish as examples of the importance of contrastive linguistics. The two final chapters include pedagogical approaches and the importance of evaluation.

Slager, William R., ed., *English for American Indians: A Newsletter of the Office of Education Programs,* Bureau of Indian Affairs, Washington, D. C., 20242, Fall, 1970.

This 85-page report focusses on two topics: language acquisition and bilingualism. The lead article by Dr. Evelyn Hatch of the English Department of USLA surveys the research done in first language acquisition. Her main thesis is that ESL teachers often demand that non-English speaking children master certain structures which are beyond the achievement of "advantaged" middle class children who speak English natively. She also maintains that present ESL materials do take into account the research that has been done in child language in the selection and sequencing of grammatical content. The second part of the report treats bilingualism under "Information Exchange." Included are surveys and reports on Indian bilingual projects now underway, including abstracts of several pertinent publications. A section is included on contrastive linguistics as related to bilingual education. The report concludes with a section on Indian languages now in use, a list of linguists working in the field with American Indians and several cultural and linguistic maps. Copies may be obtained from: Language Arts Branch, Bureau of Indian Affairs, Washington, D. C., 20242.

Spolsky, Bernard, "Some Psycholinguistic and Sociolinguistic Aspects of Bilingual Education," 1968, 12 pp. (ERIC No. ED 028 412).

Both sociolinguistics and psycholinguistics are relatively recent areas of study and they tend to overlap. One way in which they overlap is in the selection of topics, among them bilingualism and linguistic relativity. Studies of linguistic relativity demonstrate that, although there are clear surface distinctions between the way languages map physical reality, and although these distinctions may influence the ease of memory and description, there is no evidence that these differences are fundamental or that they prevent the formation of concepts. Concerning the question of how bilingualism affects language development, no final statements can be made. One extreme position, the balance theory, holds that each individual has only a certain amount of language learning ability and if it is divided between two languages, the knowledge of each language will be weaker. At present language testing instruments are not precise enough to test this hypothesis. While the evidence now collected seems to favor the balance theory, a great deal more study is needed on this complex question. Therefore, although no one suffers cognitively by learning one language rather than another, there will possibly be some less in linguistic ability when two languages are learned. Unless this is offset by increased motivation, there will be a loss in other subjects. Bilingual education is closely tied to a society that accepts both language.

Ulibarri, Horacio, and Richard Hoiemon, *Administration of Bilingual Education,* College of Education, University of New Mexico, 1969, 17 pp. (ERIC No. ED 028 429).

The administrator in a bilingual, bicultural community must act with caution, forebearance, and great understanding, paying intense heed to his community. The term "bilingualism" refers to facility in the use of two languages, ranging from a minimal knowledge of either lan-

guage to a high level of proficiency in both. "Biculturism" is a functioning awareness and participation in two contrasting sociocultures. Biculturism can be attained without being bilingual; bilingualism can be attained without dual acculturation. In developing a taxonomy for the bilingual program, the psycholinguistics and emotional commitments of the bilingual child should be considered. He may become more committed emotionally to a given concept if taught in one language rather than another. Some program objectives, which can be measured in terms of behaviors, are (1) the bilingual child will participate in more extra class activities; (2) he will learn more about his cultural values and see the differences between his native culture and the Anglo-American cultural value system; and (3) he will understand the process of acculturation. A discussion of teachers, materials, and testing, and a description of funding sources for bilingual, bicultural programs conclude this study.

Ulibarri, Horacio, *Interpretive Studies on Bilingual Education: Final Report*, College of Education, University of New Mexico, Albuquerque, New Mexico (ERIC No. ED 028 428).

This project, carried out in 1969-1969, undertook as its main purposes (1) to review the research that has been conducted on bilingual education from those persons who have been actively engaged in working with this problem; (2) to obtain their recommendations; (3) to conduct on-site visits to see at first hand programs of interest, programs with potential for achieving inter-group reactivity; and (4) to draw from the study implications for educational practice and administration and research in the area of bilingual-bicultural education. The first main section of this report summarizes the purposes of the bilingual program, growth and development, language acquisition and learning, programs and methodology, projects, and tests and measurements. The second main section describes goals, the bilingual education program, the teacher and bilingual education, materials, teacher methodology, evaluation, and school and community relations. The final section deals with the same topics in terms of implications for research. An annotated bibliography on bilingualism is followed by a selected bibliography and a listing of projects and on-going programs in bilingual education.

Young, Robert W., *English as a Second Language for Navajos: An Overview of Certain Cultural and Linguistic Factors*, Navajo Area Office, Division of Education, Bureau of Indian Affairs, Albuquerque, New Mexico, 1967, 154 pp.

This essay was prepared as the basis for a short course concerned with problems inherent in the teaching of the English language and the Anglo-American culture to Navajo children whose first experiences have been within the framework of their own tribal language and culture. The essay begins with a glance at the nature of human culture and language in general and attempts to give an insight into the world-view of the Navajo through the Navajo language. The bulk of this study provides a contrastive overview of certain features of the English and Navajo languages, including phonology, grammar, parts of speech, vocabulary, and usage. This essay provides a valuable aid to educators involved in work with Navajos.

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APPENDIX I

GLOSSARY OF TERMS

Since certain terms used in this bulletin and other works on bilingualism may be unfamiliar to the reader, a few definitions are included here for easy reference.

articulation—the production of differing speech sounds by altering the shape and size of air passages in the vocal tract.

balanced bilingual—an individual who is equally skilled in the use of two languages.

bilingualism—the use of two or more languages by an individual.

compound bilingual—an individual who translates from one language to the other (usually because he learned his second language under those circumstances) does not keep language systems separate, and experiences considerable interference between them.

content words—primarily nouns, adjectives, verbs, and adverbs—i.e., words which have a "dictionary meaning"; contrasted with *function words* (q.v.).

coordinate bilingual—an individual who has two separate language systems, usually learned under different conditions, which cause minimal interference with each other.

degree of bilingualism—how well an individual knows the languages he uses.

dialect—the variety of language spoken by members of a single speech community, either regional or social.

diglossia—a situation in which each language is typically used in, and considered appropriate to, different types of situations (e.g., home vs. outside, discussing particular topics, in certain roles, etc.).

first language (native language)—the first language learned by a child, usually the language of his home.

function words—words used to signal grammatical relationship (e.g., prepositions, articles, and auxiliaries).

idiolect—the unique speech of any individual.

interference—how one of a bilingual's languages influences his use of the other—the use of non-native sounds, constructions, or word-choices as a result of influence from the native language.

lexicon—the vocabulary or words of the language.

morpheme—the smallest recurring unit in a language which carries meaning (e.g., *cat* is one morpheme; *cats* contains two morphemes—*cat* plus the *-s* which means plural).

morphology—the study of the structure of words.

phoneme—the smallest unit of sound which makes a difference in meaning in a language (e.g., /t/ and /d/ are phonemes of English because they make a difference in meaning in such combinations as *t*in/*d*in and no*t*/no*d*.

phonology—the sound system of language.

phonotactics—the pattern of distribution of sounds in a language (e.g., English /ng/ does not occur at the beginning of words nor /h/ at the end).

second language—a language learned subsequent to a speaker's native language, sometimes the language of school or of the wider community.

syntax—the way words (or morphemes) are related to each other in a sentence—their arrangement.

target language—the language which is to be taught.

voiced sound—a sound produced with vibration of the vocal chords.

voiceless sound—a sound produced without vibrations of the vocal chords.

APPENDIX II

Ways to Describe Language

Language consists of (1) *phonology*, (2) *morphology*, (3) *syntax*, and, (4) *semantics*.

1. *Phonology* is the study of the sounds of a language.
   a. There are 44 phonemes in the English language. (Some sources list 40, 44, 45, 47.)
   b. Differences in sounds are how we know on given occasions what is being said.
   c. Minimal pairs are two words with only one phonemic difference. A phonemic difference is one that changes meaning (pick-pig; map-mat; bit-beat).
   d. Accent patterns also change meanings. (A blue bird is not necessarily a bluebird.)
   e. The phoneme-grapheme (spoken-written) relationships are often confusing in English because five vowels have many variant spellings. (cough, tough, drought.)
   f. The suprasegmentals (added variations) of stress, pitch, and juncture convey distinct phonemic differences (*what* did you say? — what did you *say*?)
2. *Morphology* is the study of the structure of words. The important structures in elementary school communication are:
   a. Compound words.
   b. Inflectional endings such as -er, -est, -ed, -ing, -s, -es.
   c. Prefixes and suffixes.
   d. The common Greek and Latin combining forms.
   e. Reversible compound words. (watch pocket, pocket watch.)
3. *Syntax* is the grammar of the language. Grammar is the set of rules governing the use of the language so that people can communicate meaningfully and consistently with each other.
   a. Basic sentence patterns:

      -noun/transitive verb/object
      -noun/linking verb/predicate
      -noun/verb/prepositional phrase

   b. Variations:

      -making negative answers
      -choosing "or"
      -expansions

   c. Transformations:

      -"there" changes

-"questions" changes

-question words

-passive transformations

-changing verbs to nouns

-combining kernal sentences

-using "until," "if," "because"

-past tense changes

-"tag-on" questions

4. *Semantics* is the study of the meanings communicated through language.

   a. English is a hybrid language containing many words borrowed from other languages.

   b. The listener or the reader must rely on context clues. Meanings depend on context.

   c. The language contains many figures of speech, idiomatic expressions and slang forms.

   d. The vocabulary contains antonyms, heteronyms, homographs, homonyms, synonyms.

   e. Suprasegmentals, which are phonemic because they change meanings, are also semantic in communicating meaning changes. (How many ways can you change the meaning of "Hmmm" by changing pitch, cadence, inflection, stress?)

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